Volume IX, No. 2 66 February, 1933

SOAP

with which is included an

Insecticide & Disinfectant Section

Published by MACNAIR-DORLAND COMPANY, INC., 136 Liberty Street, New York

LOOK
ON PAGE 75

FOR THE STORY OF A NEW

PRODUCT THAT MAKES

INSECTICIDES SMELL PLEASANT!

GIVAUDAN-DELAWANNA INC.
80 FIFTH AVENUE, NEW YORK, N. Y.

READY FOR YOU

This New 1933 Falcon Price List

The new Falcon Price List of sanitation products—the most complete list in the industry—is now ready, and is yours for the asking.

Prices on a considerable number of Falcon products have been lowered to a point where the cost is no more than the ordinary inferior brands. But here the comparison ends. Falcon standards of excellence, never relaxed, will continue, as in the past, to lead the industry.

Especially on Falcon Para Products have price reductions been effected. Blocs, blockettes, and crystals, with qualities peculiarly Falcon, will command your utmost attention. Made with the finest of essential oils, and under strict Laboratory Control, these products set up new standards of economy. They are attractively packaged, enjoy a nation-wide reputation for quality, and invite comparison on any basis.

These trying times demand extra value in every purchase. Sanitation products are no exception. Assure yourself this extra value with Falcon Laboratory Controlled products in 1933.

The coupon brings the Price List. Mail it now.

MAIL THIS COUPON TODAY

THE EAGLE SOAP CORPORATION
25 E. Jackson Blvd., Chicago, Ill.

Please send me your new Falcon Descriptive Price List.

Name_____

Address_____

City_____ State_____

Specialists in Sulfonated Oils

THE RICHARDS CHEMICAL WORKS
INCORPORATED
MANUFACTURING CHEMISTS
WARREN AND MORRIS STREETS
JERSEY CITY, N. J.

Soluble Oil Bases for

POLISHES

SOAPLESS
SHAMPOOS

DISINFECTANTS

CLOCKS VARY

but NOT du Pont Aromatics

You can depend on their absolute purity and uniformity at all times.

GERANIOL EXTRA

The distinguishing features of this du Pont Aromatic are its uniformity, freedom from any sharp by-odors, and its delicate, rose-like odor. Improved processes of manufacture and the most highly skilled technical direction insure its chemical purity.

BENZOPHENONE CRYSTALS

They are an excellent fixative. And embody the clear fresh odor note of the rose in a pure white crystalline form. These du Pont Crystals will not discolor and are absolutely stable. Even with these outstanding features Benzophenone Crystals are priced well within the cost range of any toilet or liquid soap formulae. These Crystals are characterized by their high boiling point.

CITRAL

Is water-white and free from Methyl Heptenone. And like all other du Pont Aromatics, added refinement in manufacture, together with complete laboratory control, adds value to *your* product.

DU PONT AROMATICS

E. I. DU PONT DE NEMOURS & CO., INC.
Fine Chemicals Division
260 WEST BROADWAY, NEW YORK, N. Y.
7 South Dearborn St., Chicago, Ill.
SOLE DISTRIBUTORS FOR Société Usines Chimiques, Rhône–Poulenc, France

MAIL COUPON FOR SAMPLES AND FURTHER INFORMATION

E. I. DU PONT DE NEMOURS & COMPANY, INC., Fine Chemicals Division, 260 W. Broadway, New York

Gentlemen. PLEASE SEND ME SAMPLES of your_____

_____ I want to test them for myself. It is understood this does not obligate me in any way.

Name _____

Address _____

City _____ *State* _____

S-2

Say you saw it in SOAP!

SOAP

Reg. U. S. Patent Office

Volume IX
Number 2

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DR. FOSTER D. SNELL
Consulting Technical Editor

Published monthly on the 15th by

MACNAIR-DORLAND COMPANY, INC.

136 LIBERTY STREET NEW YORK, N. Y.

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Customers favor products that have INVITING CLOSURES

THE SALES APPEAL of your closure does not end with beauty alone. Good looks are a factor in selling, of course. But most buyers today are "closure wise." Having had much experience with glass packaged products, they demand convenience as well as good looks.

Easy removal is always a factor in the choice of the "closure wise" buyer. And if yours is a product that is used a little at a time, the resealing qualities of the closure are likewise highly important. Liners that deteriorate or come loose, cap shells that rust or corrode on the bathroom or pantry shelf can hardly be expected to win consumer favor.

Obtaining a closure for your product that is "right" from every angle is by no means a simple task. That is why so many important manufacturers are taking advantage of 7-Point Closure Service. The broad experience and complete facilities to be found at C. C. & S. smooth the way to a correct solution of every sealing problem.

Use this Service to obtain the **RIGHT CLOSURE FOR YOUR PRODUCT**

CROWN CORK & SEAL CO. Baltimore Md.

WORLD'S LARGEST MAKERS OF CLOSURES FOR GLASS CONTAINERS

It's all in the **CAP**

Say you saw it in SOAP!

QUALITY SANITARY • SPECIALTIES •

A Liquid Soap Base You Can Depend Upon

NOPCO KOKOBACE, used extensively in making perfumed liquid soaps and shampoos, is a high grade concentrated coconut oil potash soap. Manufactured from specially selected coconut oils, assuring excellent quality.

RUBLESS FLOOR WAX

Nopco 1725

A liquid rubless floor wax that dries to a lustrous durable film. Its water resistant properties compare favorably with solvent wax solutions. A stable emulsion.

FURNITURE POLISH

Nopco 1716-AL-2

An improved furniture polish which actually cleans as it polishes. It adds a rich, lustrous film and leaves no trace of oiliness or greasiness. Easy to apply and economical. A popular seller.

AUTO POLISH

Nopco 1669

A stable emulsion product. Cleans and polishes with a minimum of effort. Leaves a glistening, bright finish.

SCRUBBING SOAP

Nopco 1715

A pine oil scrubbing soap for general cleansing purposes. Disinfects as it cleans. Popular in cleaning linoleum floors, woodwork, tiling, etc. Will not injure surface or hands.

SCOURING COMPOUND

Nopco 1687-A

An excellent substitute for soap. A liquid product instantaneously solubie in water. Used in dish washing machines. A cleanser of unusual emulsifying properties, widely used for general scouring purposes, especially where grease is to be removed.

PINE OIL BASE

Nopco Albasol AR

An excellent base for making soluble pine oils for spraying, disinfecting, and insecticide purposes.

NOPCO quality products are always uniform and of unvarying high standards. This means complete satisfaction to ultimate consumer. Write for complete information regarding our products in which you are interested.

NOPCO

NATIONAL OIL PRODUCTS COMPANY

Boston Chicago **HARRISON, N. J.** Hamburg, Germany San Francisco

Say you saw it in SOAP!

Stronger, more economical, more concentrated than CITRONELLA CEYLON or JAVA.

Besides effectively replacing Citronella, it is an excellent perfume material for all technical products including soaps (solid or liquid), hand soaps, hand cleaning compounds, petroleum, disinfectants, insecticides, etc.

FRITZSCHE BROTHERS, INC.

78-84 BEEKMAN STREET
NEW YORK, N. Y.

Proprietors of
PARFUMERIES DE SEILLANS
Seillans, France

Sole Agents in U. S. and Canada for
SCHIMMEL & COMPANY
Miltitz (near Leipzig) Germany

Say you saw it in SOAP!

ALBERT VERLEY
INCORPORATED

GERANIUM ARTIFICIAL GERANIOLS
for Soap Perfume

With the market for natural geranium oil in its present unsettled condition, the above products should be seriously considered by the soap manufacturer. Both work excellently in soap and will provide the geranium note at a cost which will be reasonable and at the same time stable. May we submit generous working samples?

PERFUME SPECIALTIES

In our laboratories, we have facilities for manufacturing a complete line of compounds for soaps of all kinds, theatre sprays, para products, polishes, fly sprays, etc. Besides our standard perfume specialties, we can make up individual odors to suit your needs. It will cost you nothing to investigate the possibilities of these products. What are your problems?

SOAP SPECIALTIES
By Tombarel, Grasse, France

Resinoids

Tombarel Freres produce a complete line of resinolds, all very interesting bodies for soap perfume. Resinolds not only give character to soap odors, but also act as fixatives.

Lavender, Absolute
Oil Vetivert
Oil Geranium

also headquarters for

RHODINOL-S
IONONE SAVON
MUSCOGENE-S
LABDANUM CLARI-S
IRONE SPECIAL-S

Pacific Coast Office
MEFFORD CHEMICAL CO.
1026 Sante Fe Ave.
LOS ANGELES
Telephone—TRinity 6894

Main Office
11 E. Austin Ave.
CHICAGO
Telephone—SUperior 1203

New York Office
114 East 25th St.
NEW YORK
Telephone—GRamercy 5-0928

SOAP has made an unusual record in holding advertising at a high level — —

WHY?

No *Scatterville* Circulation

Like one of Chicago's famous newspapers, SOAP does not offer a circulation in "Scatterville." It does not attempt to spread out into fields where it obviously does not belong, merely to coax in stray advertising. The circulation of SOAP is concentrated among manufacturers and distributors of soap and sanitary products.

No *Mythical* Circulation

In every issue, circulation figures for the preceding issue are printed. There is no opportunity here for circulation fakery. *Photostatic copies of current Post Office receipts are attached to advertising bills.* When you buy space in SOAP your advertising goes to 3,000 readers,—no less.

Highly *Responsive* Circulation

Manufacturers and distributors reading SOAP are alert and alive. They have not set their ways in any one rut, content to run out their business lives without change. They are unusually responsive to the right kind of advertising. If your product can demonstrate advantages, advertising in SOAP can secure new customers for you.

A Real *Reading* Circulation

A man closely identified with the industry, and in a larger way intimately associated with national advertising and all types of publications, recently remarked—"I have never seen a publication of any kind as closely read by the industry it serves as SOAP." The editor of one of England's outstanding chemical trade papers wrote—"I find your journal the most informative of all the technical journals we receive here from America. Each issue is cut into a a dozen parts and filed for future reference. With most other journals one is fortunate in getting one article per issue."

— real, honest, responsive circulation plus unusual reader interest—here is the reason for the volume of advertising carried regularly in SOAP.

Say you saw it in SOAP!

"SO THAT'S THE *PACKAGE OF THE CENTURY*... EH?"

Possibly the gentleman with the glint in his eye is a production manager—which would account for his slightly skeptical air.

As a hard-headed business man he's naturally suspicious of radical innovations. He knows that some packages, even though artistic, can prove perfectly impossible in actual production—considering *economical* packing and sealing processes. And who doesn't have to consider economy today?

★ ★ ★

Anchor has always been strong for good looks in packages and in closures. We've preached it for years, and are fully convinced of the sales power of pleasing appearance. Yet we're more than sympathetic with production-minded men. It's almost an obsession with us that a closure first and last be practical.

On the one hand, we admit there are other closures on the market besides Anchor that are attractive in appearance—although Anchor takes off its hat to none in the matter of good looks.

But on the other hand, what we do say, as emphatically as we can, is that every single Anchor style is designed, first of all, to do the best possible sealing job—to adequately protect the products for which it is adapted. They have been developed and improved by sealing experts, by men familiar with production problems, by an organization that for a quarter of a century has been making closures to fit packaging methods and production conditions... economically.

★

ANCHOR CAP & CLOSURE CORPORATION
Long Island City, N. Y. · · · Toronto, Canada
BRANCHES IN ALL PRINCIPAL CITIES

ANCHOR MOLDED CAPS

● In the foreground is the Anchor Molded Bottle Cap, a style that has rapidly come into popular favor and been adopted as standard for hundreds of drugs, toilet preparations and specialties. Note the finely knurled design that aids the fingers in gripping, which is an advantage both to the manufacturer in application, and is appreciated by the consumer in using the product.

Back of the standard bottle cap are shown the jar cap with its severe and simple lines; and the medium and tall bottle caps with their conservative Gothic design to give them smartness without flashiness, to accentuate their height and to provide a good gripping surface.

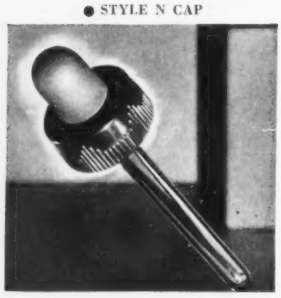
MOLDED CAPS WITH APPLICATOR DEVICES

● STYLE A CAP

● STYLE P CAP

● STYLE D CAP

● STYLE N CAP



In order to provide maximum convenience for the user, certain products can use to advantage various types of applicators that are an integral part of the package. For meeting these conditions, Anchor Molded Bottle Caps are supplied in a number of variations to accommodate different types of applicators. The closures and liners designed to accommodate the applicators are furnished by Anchor; the assembling with the applicator device being done either by the packager or the manufacturer of the applicator.

Style A Cap is constructed with a projection for insertion of a glass applicator rod or quill brush.

Style D Cap has the same sort of projection of a suitable size to accommodate a wire dauber.

Style N Cap is provided with a hole molded in the top, into which is inserted a nipple and dropper tube. The nipple is so constructed as to hold the tube in place.

Style P Cap has a solid pin over which a quill brush is fitted and cemented.

Designed · FOR *EFFICIENCY*

● Caps made of plastic materials are inherently beautiful; the material itself rich and lustrous. Added to that, Anchor has created special designs for the different styles to take full advantage of the beauty of the material. Anchor Molded Caps are conservative, dignified, well proportioned, tasteful.

But beyond appearance, Anchor Molded Caps are unique in other ways—in their sealing efficiency, in their adaptability to either machine or hand application, in their ease of removal and convenience to the consumer. It is these less spectacular but highly important points of superior efficiency that we want to emphasize.

The sealing results provided by Anchor Molded Caps are attributable to certain specific features of construction. Chief among these are the *liner retaining ledge* and the *liner recess*. These consist of a ridge or projection which encircles the inside of the cap; and the recess above it into which the liner fits. The function of these two features is to hold the liner securely in place; and yet at the same time allow it to rotate freely as the cap is applied or removed.

By ensuring that the liner always stays in place, the product is never left unprotected. Hence a positive safeguard is provided against leakage, evaporation or deterioration of the contents. And against consumer or dealer dissatisfaction, as well.

More directly, too, the manufacturer benefits—because these features make practical machine application; because they permit caps to be delivered completely assembled, saving time and expense; because they make unnecessary the use of oversize liners which are apt to buckle, wrinkle or cause cap breakage; because they permit the liner to rotate freely, thus preventing injury to its surface from imperfections in the glass as caps are applied, removed, or reapplied.

The scientifically constructed thread in Anchor Molded Caps is specially designed for application to glassware made to Glass Container Association standards. It is broad and shaped to conform to the glass thread and to give a firm, sure grip around the entire circumference of the bottle. Its length is exactly predetermined to prevent jamming or interfering with the proper seating of the liner. The unique thread construction promotes an even distribution of sealing pressure, provides greater strength to the cap, and is the determining factor in easy application and removal.

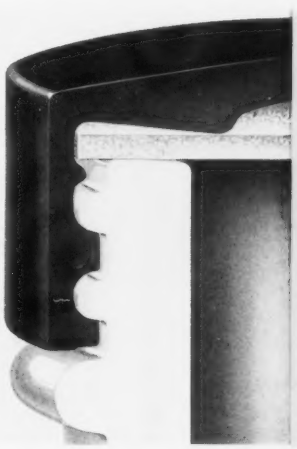
In the medium and tall styles, the thread is exactly the same length as in the other caps, enabling them to be applied with a minimum number of revolutions, and adding to their convenience for the consumer to remove and replace.

On the inside of the top of the cap where it contacts with the liner, the surface is not horizontal but slopes slightly toward the center. This *wedge top construction* increases the pressure on the liner at the point of contact with the top of the glass container, providing a tighter seal. It also forces the liner to bend slightly, putting it under tension, and offering a gradual and increasing resistance to the tightening of the cap. Its effect is also to automatically center the cap on the container. It is a feature that contributes much to the unusual sealing efficiency of Anchor Molded Caps.

Anchor Molded Caps are preferred by production men, due to their perfect adaptability to the processes of application, either by hand or machine. They are started easily because of the loose way in which they fit over the container finish before tightening. They require a minimum of turning. They seat easily, and offer gradual resistance as they are screwed home. Where the gripping surface is limited as in the bottle cap, the knurling of the design provides a secure grip for the operator's fingers or machine gripping devices.

In machine application, the general strength of the caps and the use of correct size liners are the two outstanding factors that make for smooth operation. One big advantage is that Anchor Molded Caps need not be inspected to assure the presence of the liner, even though they be tumbled about in a machine hopper. The liner retaining features take care of that.

If Anchor Molded Caps had no other advantages, their ease and speed of application alone would amply justify their adoption.



CUTAWAY VIEW OF THE ANCHOR MOLDED CAP

Just below the liner you can plainly see a projection. That is the *liner retaining ledge* — an improvement that means much in avoiding packaging difficulties as well as preventing consumer dissatisfaction.

Note also the special *construction of the cap thread* (described above), how it continues to the lower edge of the cap. This insures a firm, sure, close grip around the full 360° circumference of the jar or bottle.

***The wedge top* (the part of the cap in contact with the liner) presses the liner down, keeping it under tension, which adds greatly to its positive and efficient sealing. This also is described above.**

Eminently practical...

EVERY ONE

It is the very differences in products, in product characteristics, in methods of packing and sealing that make Anchor closures eminently practical. For Anchor does not attempt to do everything with one or two types of caps. It recognizes that no single type of closure could possibly meet all the diverse needs that exist. Hence there is no temptation for Anchor to urge the adoption of any closure for a product or a package to which it may be imperfectly suited. Through the years Anchor has developed new types of closures and improved existing types to meet new conditions of packaging and to adapt new types of products to glass packing.

ANCHOR
CAP & CLOSURE CORPORATION

22 Queens Street, Long Island City, New York

★ ★ ★ BRANCH OFFICES ★ ★ ★

ATLANTA	CLEVELAND	LOS ANGELES	MONTREAL	PITTSBURGH	SEATTLE
BOSTON	DETROIT	LOUISVILLE	NEW YORK	ROCHESTER	ST. LOUIS
CHICAGO	HOUSTON	MINNEAPOLIS	PHILADELPHIA	SAN FRANCISCO	TORONTO

There are no better Naphthalene Perfume Bases than tested Perfume Bases

and there are no better tested Perfume Bases than

FELTON'S COLOROME NAPHTH *

* Available with or without color for perfuming Naphthalene...

FELTON CHEMICAL COMPANY, Inc.

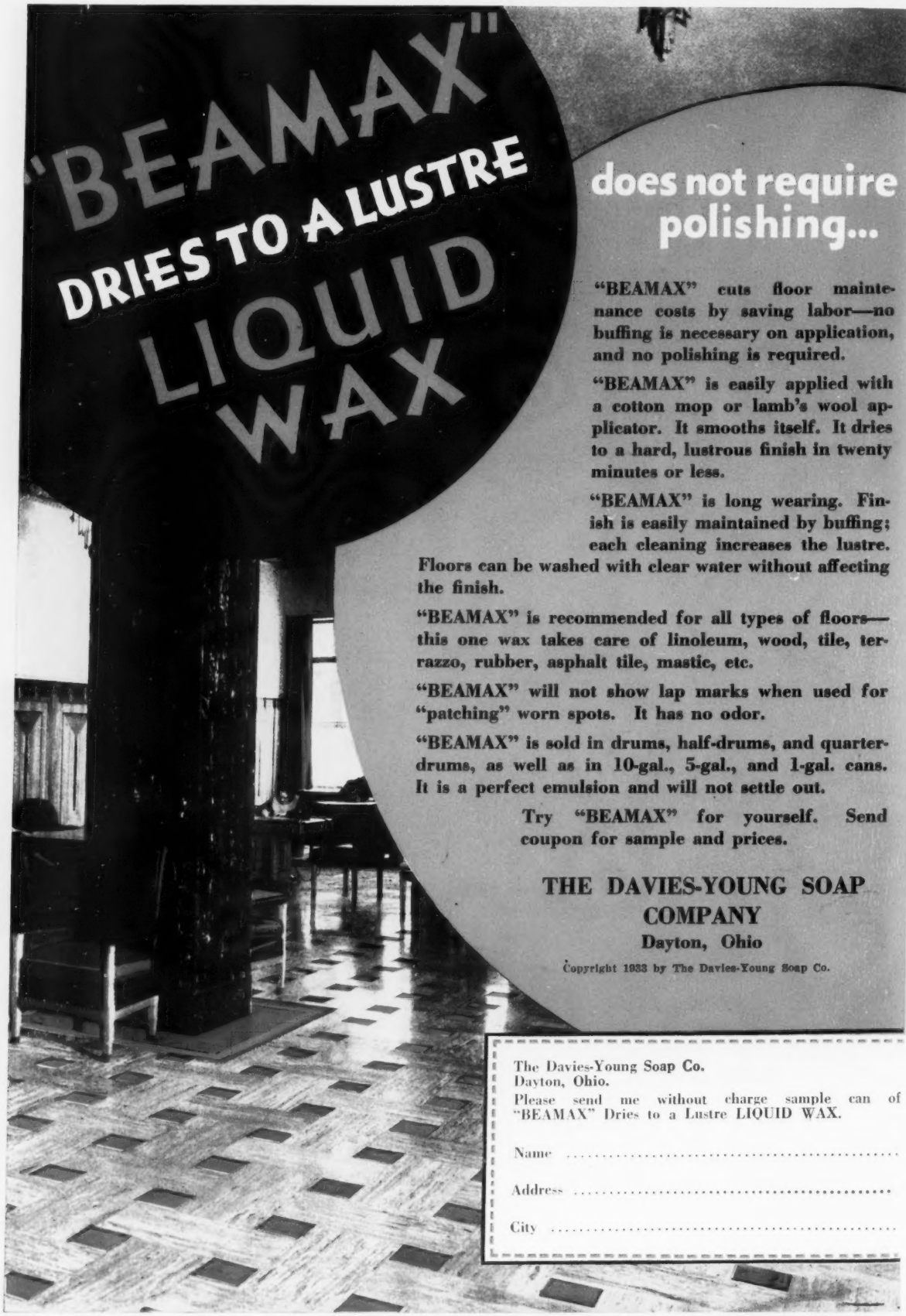
Executive Offices and Factory—599 JOHNSON AVE., BROOKLYN, N. Y.

Chicago, Ill., Office—1200 NORTH ASHLAND AVE.

Stocks Carried in the Following Cities:

LOS ANGELES, CAL.	SAN FRANCISCO, CAL.	CHICAGO, ILL.	NEW ORLEANS, LA.
WM. PAUER	P. M. RICH	M. HARTSTEIN	ROBERT E. FELTON
1131 N. Orange Grove Ave.	1282 Folsom St.	1200 No. Ashland Ave.	Balter Bldg., Rm. 407

Say you saw it in SOAP!



does not require polishing...

"BEAMAX" cuts floor maintenance costs by saving labor—no buffing is necessary on application, and no polishing is required.

"BEAMAX" is easily applied with a cotton mop or lamb's wool applicator. It smooths itself. It dries to a hard, lustrous finish in twenty minutes or less.

"BEAMAX" is long wearing. Finish is easily maintained by buffing; each cleaning increases the lustre. Floors can be washed with clear water without affecting the finish.

"BEAMAX" is recommended for all types of floors—this one wax takes care of linoleum, wood, tile, terrazzo, rubber, asphalt tile, mastic, etc.

"BEAMAX" will not show lap marks when used for "patching" worn spots. It has no odor.

"BEAMAX" is sold in drums, half-drums, and quarter-drums, as well as in 10-gal., 5-gal., and 1-gal. cans. It is a perfect emulsion and will not settle out.

Try "BEAMAX" for yourself. Send coupon for sample and prices.

THE DAVIES-YOUNG SOAP COMPANY
Dayton, Ohio

Copyright 1933 by The Davies-Young Soap Co.

The Davies-Young Soap Co.
Dayton, Ohio.
Please send me without charge sample can of "BEAMAX" Dries to a Lustre LIQUID WAX.

Name .....

Address .....

City .....

Say you saw it in SOAP!

BIGGER SALES!
..by CONTAINER *showmanship!*

MODERN methods call for sales by *showmanship.* Color-labeling treatments are giving the CONTAINER a voice in the market-place. They flash a product quality signal to the trade. "EMPECO" Packaging—Designing and Decoration —points products into favorable opinion. It invites the purchase that *contents* merit can fully justify.

- Trade Up! — with a Better Package!
- Full-color Lithographed • Sized to suit.
- Plain CANS too!

METAL PACKAGE CORPORATION
110 E. 42nd ST., NEW YORK CITY
ESTABLISHED 1909
SALES OFFICES AND PLANTS • NEW YORK CITY • BALTIMORE • BROOKLYN • CHICAGO
THE FISCHER CAN COMPANY DIVISION • HAMILTON • OHIO

Say you saw it in SOAP!

Do *you* want a *Partner*?

If your present sales and profits are entirely satisfactory to you, then this offer may not be of interest.

On the other hand, if you can stand more business NOW, here is a suggestion that actually works and has proven itself again and again.

Just add a few suitable long profit products to your line that you can sell to your present customers *without going to the bother and expense of investing in machinery, stocks of raw materials, labels,* etc.

We will take care of all that for you,—and supply you with high grade finished products at prices so low that it would scarcely pay you to make them up yourself.

In addition, we have attractive imprint labels ready for your name and address.

OUR HALF	YOUR HALF
Making up for you high grade finished products at minimum cost.	Selling a few extra profitable items to your present trade and watching your sales jump.

There are some concerns who are actually *making more money today than ever before.* Clifton Products can aid you, too.

CLIFTON CHEMICAL CO., INC.

CLIFTON BUILDING

246 Front Street **New York City**

Makers of Quality Sanitary Products for the Trade Since 1912

TEAR OFF HERE

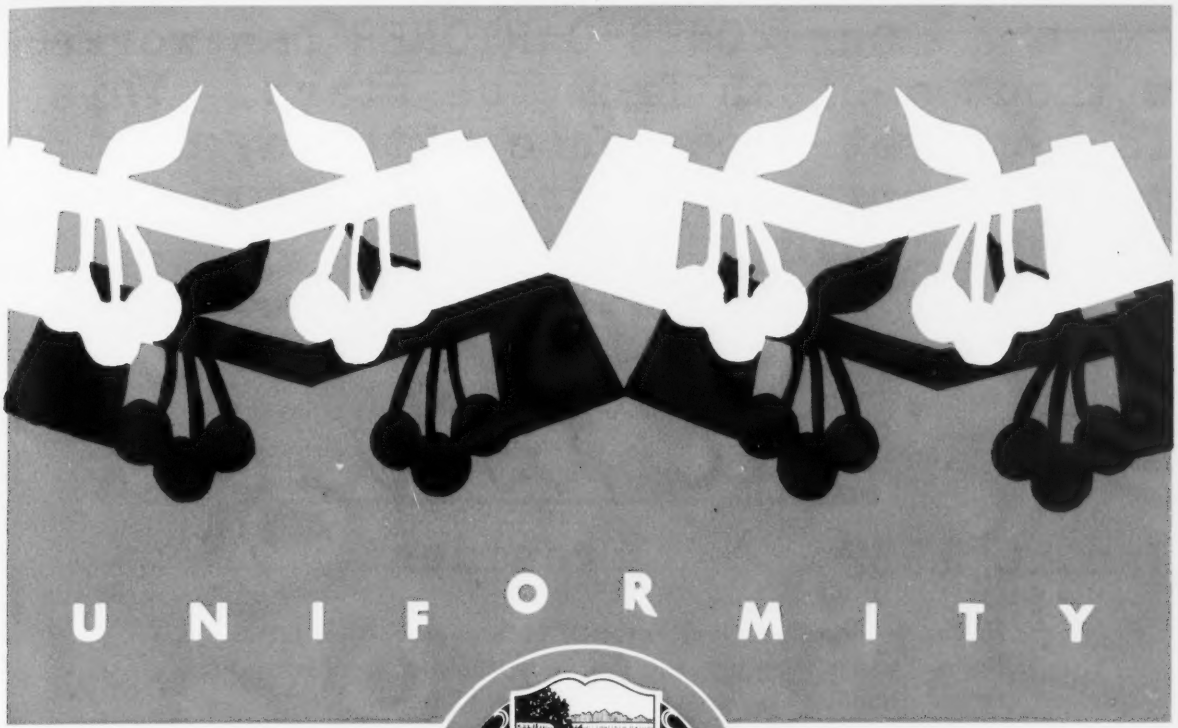
CLIFTON CHEMICAL CO., INC.
246 Front Street, New York City.

Your plan is worth looking into. The items checked would probably held increase our sales. Please quote:

- ☐ Semi Castile Liquid Soap
- ☐ Liquid Soap Base
- ☐ Liquid Soap Dispensers
- ☐ Metal Polish
- ☐ Deodorizing Cakes and Blocks
- ☐ Deodorizing Block Containers
- ☐ Rub-No Wax
- ☐ Silver Polish Paste
- ☐ Liquid Floor Cleanser
- ☐ Oil Soap
- ☐ Coal Tar Disinfectant
- ☐ Pine Tree Disinfectant
- ☐ Shampoo Liquid and Base
- ☐ Shaving Cream

.....
(NAME)

.....
(ADDRESS)



Niagara
UNADULTERATED PARA
PARA DICHLORO BENZENE
NIAGARA ALKALI CO.
NIAGARA FALLS

Niagara PARA

UNADULTERATED
PARADICHLOROBENZENE

Always white • always uniform
• • • clear, fine crystals.

And Pearlpara . . . the new Niagara Para in bead form . . . has this same constant *good quality.*

NIAGARA ALKALI COMPANY

9 East 41st Street • New York, N. Y.

Associated with Electro Bleaching Gas Co. Pioneer Manufacturers of Liquid Chlorine

Say you saw it in SOAP!

Our JONES CARTONER has worked without a hitch from the start. This is my first experience with any new machine operating perfectly from the very beginning.

Very truly yours,

MOFFAT, INC.

Alex. W. Moffat

Jan.10,1933. President.

Moffat, Incorporated, have erected an anti-depression factory in Boston, where they produce the finest cooking chocolate with a record economy of labor and elimination of waste.

Our contribution to this achievement pleased Mr. Moffat so much he wrote us a letter on the subject. Above, we reproduce its final paragraph with his signature.

The CONSTANT MOTION CARTONER

handles with like success many products including soap cakes, dentifrice, cosmetic and other tubes, bottles, jars, cans, etc., etc. It feeds, folds and inserts direction sheets and corrugated board liners with the load. Let it help you

"BUCK the DEPRESSION"

R. A. JONES & COMPANY, INC. » P.O. BOX 485 » CINCINNATI, OHIO

Our laundry and toilet soap presses are used almost exclusively by manufacturers, the world over, for pressing cakes of soap of every shape, size and quality. Write for catalogue.

Say you saw it in SOAP!

SOAP

Volume Nine Number Two

The Philippines Are Freed

OVER President Hoover's veto, an act to free the Philippine Islands was passed by Congress last month. This initial legislation, said to be designed to give eventual freedom to the Islands, apparently does not meet with the approval of American sponsors of freedom or with the approval of business interests in the Philippines. Political leaders in Manila likewise condemned it both before and after passage as futile and inadequate.

But was Congress thinking of the Filipinos when the bill was passed? Not much! Our lawmakers were feeling the pressure of the powerful lobby of American and Cuban sugar interests, of cotton oil producers, of fish oil producers, and other "agricultural" interests. Congress had to do something. The demand to restrict the importation of Philippine sugar, fibres, and coconut oil was too great to ignore. The cry to protect the American farmer from "the products of cheap Oriental labor" was too loud to be hushed with discretion. Even the message of sound reasoning which accompanied the veto by President Hoover availed nothing.

As we read reports of parades in the Philippines celebrating "independence," we wonder how long it will be before the mass of Filipinos really appreciate the exact proportions of the lemon which Congress has handed them. And we wonder how long it will take American agriculture to realize that the new legislation is without one iota of practical value in helping solve its problems.

—o—

A Raw Deal Attempted

COME what may, the advocates of a drastic duty on all imported oils and fats are determined in their efforts to push legislation through Congress in one way or another. The latest is the amendment which was accepted last month by the House to the so-called Domestic Allotment Farm Relief Bill, and on which hearings were recently held before the Senate Committee on Agriculture. The amendment called for five cents per pound duty on all imported oils and fats, and a duty on raw materials from which they are extracted. The aim of the amendment was, of course, to give the farmer greater protection against butter substitutes by a prohibitive duty on imported fatty raw materials. The effect on the soap industry would have been to more than double raw material costs.

This is one of the rawest pieces of legislation which the powerful farm lobby has yet tried to put across,—or more correctly, sneak across in the form of an amendment. The fact that it will not become a law does not alter the intent of the amendment. It is an inkling of what the soap industry

and other consumers of imported oils and fats may look forward to. A lot of agricultural chestnuts are due to be pulled out of the fire by the next Congress at the expense of industry.

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Castile Soap,—U. S. P. or Not?

ALTHOUGH from a recent decision of the United States Circuit Court of Appeals in the case of the Federal Trade Commission versus Kirk, castile soap is held to be not necessarily a soap made solely from olive oil, the U. S. Pharmacopoeia states that castile soap is a pure olive oil soap. In the enforcement of the Food and Drugs Act, the definitions of the Pharmacopoeia have the force of law. Therefore, as *Drug & Cosmetic Industry* pointed out in a recent issue, if the Food and Drug Administration might choose to take a hand in the matter, the marketing of non-olive soaps as castile could well be the cause of further legal complications. Label statements, noting wherein the non-olive soaps differ from U. S. P. castile, present themselves as the subject for legal argument.

The original suit of the Federal Trade Commission against Kirk, filed about ten years ago, was for unfair competition. Misbranding played no part in it. The Commission, with a tremendous mass of evidence, including hundreds of meaningless depositions, attempted to prove unfair competition, and failed. Does his decision insure immunity against a charge of misbranding under the Food and Drugs Act? In spite of the interpretation which has been placed upon the decision of the Circuit Court of Appeals, we do not believe that it does. At any rate, it presents an interesting problem for the Food and Drug Administration and the Pharmacopoeia Revision Committee to think about.

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Wrapped Or Unwrapped?

FROM one of the largest soap manufacturers of Canada, comes the statement that the day of wrapped soaps is ended, except perhaps in the higher priced luxury soaps. The same manufacturer pointed to the marked increase in sale in Canada of the large unwrapped five-cent tablets of bath and toilet soaps. The largest order ever placed with a Canadian soaper by a leading Montreal department store was for the large round bath cakes. The entire shipment was sold out in one day and a second order for the same quantity was placed for immediate delivery. The manufacturer claims that the public is being educated to a large bar of high grade soap for little money, and that obtaining this business under present competitive conditions precludes the expense of wrappers and wrapping.

In spite of the increase in volume in the sale of unwrapped toilet soaps, and the unusually low prices at "special sales" in department stores throughout this country and Canada, we do not believe that the day of the wrapped soap is past. Except where a stock of unwrapped toilet soap moves with unusual rapidity, the "naked" bar has a dozen obvious disadvantages on a retail shelf. For regular stock sold through the average drug, grocery, or chain store, a wrapper is almost vitally essential on toilet soap. We believe that our friends in Canada have been influenced to too great an extent by recent large sales to department stores for quick turnover. Let these same soaps be carried in stock for a few weeks and the reasons for wrapping them would be far more apparent.

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Dr. F. J. Cullen, head of the Food and Drug Administration of the Department of Argiculture, condemned in a recent statement testimonial advertising of medicinal products. We would go a step further by saying that paid testimonial advertising of retail products on the whole, as generally practiced today, is a prostitution of advertising in its lowest form.

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Advertisements of foreign-made articles, included among which are some six million pounds of toilet soap imported annually, must include a plain statement as to the country of origin, according to a bill in Congress. We fear that this bill reckons without consideration of the buying psychology of the average American woman where soaps are concerned. The myth still lives in the minds of some that foreign soaps are superior to our own. So why compel emphasis on foreign origin under the circumstances?

SOAP PERFUMING

By Philip Chaleyer

In the retail channels of the large cities, scant consideration is given those toilet soaps which are poorly perfumed. Good perfuming is essential to sales success.

THE success of many French toilet soaps to a great extent has been due to the fact that they are exquisitely scented. Of course, the quality of the soap stock is of first importance, but while American soapmakers, due to improved manufacturing methods, have succeeded in obtaining soaps of the finest quality, they have not as a whole paid sufficient attention to the important factor in sales appeal,—the perfume. This has undoubtedly been a contributing factor in many a failure to obtain the proper volume of sales in the case of certain well advertised soaps. Leading manufacturers, it seems will not hesitate to make large appropriations for advertising but will try to cut to the bone on the cost of the perfumes for their soaps. They forget that if attractive advertising makes the first sale and keeps their name in front of the buying public, it is an attractive odor that helps bring the repeat order. They must, first of all, please the women who buy most toilet articles and who are always influenced by pleasing odors.

The cost of the perfume oil is an important factor in the final cost of a cake of soap, especially in the popular ten cent cake. For this reason, purchasing agents generally have a tendency to buy as cheaply as possible without giving sufficient consideration to quality. They forget, that when given two oils of ylang ylang, for instance, at different prices, say $3.00 and $4.00, the $4.00 product may give not only a finer odor, but have twice the perfuming value of the $3.00 product. Many soapmakers consider essential oils and aromatic chemicals that are higher than $4.00 or $5.00 as being out of their reach. This should not be the case, as certain aromatic chemicals sold at higher prices are so strong that they are cheap when compared in odor strength with less expensive products, and should find a place in the perfuming of toilet soaps. These products in 10% solution are often equal or superior in strength to the strongest aromatic chemicals or essential oils of similar price and 100% strength. Soapmakers should test aromatic products in soap on strength, odor value, tenacity, stability, etc. and their choice be determined by these tests. In the case of white soaps, the product should be tested in the sunlight, to see if discoloration takes place by exposure. These test cakes should be kept at least two months in observation. Very often two products tested individually will not give discoloration but on being mixed together, will discolor. It is, therefore, necessary to proceed by elimination and conduct a series of tests. Generally, products discoloring in soap belong to the amino, aldehyde, nitrate or phenolic group of chemicals. Discoloration may also come from impurities contained in any one product and

sources of supply should be checked thoroughly as sometimes the same product coming from two different sources may give varied results.

One can see, from what has been said above, that certain aromatic chemicals or essential oils will be excellent in soaps and others will have to be rejected entirely or their use limited to certain types of soaps. The fact that certain of these products discolor in soap is one of the reasons why most French soaps are colored. Most American manufacturers prefer to make white soaps because the public has been educated by way of advertising to consider pure white soaps as the best, though it is not always true and considerably limits the field not only to odors but also to raw materials used in soapmaking.

PROCESSES of manufacturing must also be given due consideration when selecting a perfume for toilet soap, though the processes today are rather well standardized and most fine toilet soaps on the market are of the milled variety. Nevertheless, there is still a large quantity of floating soaps and cheaper toilet soaps sold in which the perfume has to be introduced directly into the crutcher. In this case, only the cheaper essential oils or aromatic chemicals are generally used, such as artificial sassafras, cedarwood, cassia, thyme, citronella, terpineol, etc., and only seldom great care is taken really to perfume this type of soap, for the main object is to cover the fatty odor of the soap stock. Floating bath soaps of the ten cent size should be given an agreeable perfume as this price today is sufficient to permit more attention to be given to this problem and will do a great deal toward increasing their sale. As the perfume has to be added in the crutcher while the soap is still hot, if the perfume is too volatile, a great part is lost. For this reason, perfumes for this type of soap should contain a large amount of resins, balsams, crystalline and high boiling substances which will naturally hold better under these circumstances as they are not too sensitive to the action of heat and alkalies.

The secret of perfuming milled soaps and in fact, all kinds of soaps, lies in the use of soluble resins and balsams in large proportion. They give a good background of odor, something upon which to build. The crude resins do not give the same results, because they contain impurities which render them unsuitable for use in soap. They also contain dirt and sometimes gums and waxes which are insoluble in essential oils or alcohol and give strong coloration with alkaline solutions. Though some of them may give a slight coloration when used in white soaps, they are generally very stable and retain their odor for a long time. They also act as fixatives and help to retain in soaps the odor of more volatile products. Styrax, balsam peru and balsam tolu form a good background for all types of odor, but are particularly good fixatives for lily of the valley, lilac, chypre, rose and in general, all floral bouquets. Benzoin is very good for rose, and oriental bouquets; orris for violet; castoreum for oriental bouquets and in general, anywhere an animal fixative is required. With the exception of castoreum, soluble resins can be used in large amounts and form from 20 to 30% of the perfume in any soap formula.

Results obtained with soluble resins have sometimes been reported irregular. This comes from the irregularity in quality of some of the commercial products, which some times are "loaded" with residues from the manufacture of synthetics, such as residues of ionone, rosin or solvents in order to be offered at low prices. These products are very frequently reinforced with synthetic products or extracted by a process which fails to remove all the impurities contained in the gum. They may also pick up impurities through long storage in tins or drums. For our tests, we have used products that we have made in our own laboratories, and for this reason know the results are those obtainable with a pure product in normal conditions.

Some soluble resins discolor in white soap and can only be used in colored soaps. Benzoin, balsam peru, balsam tolu, castoreum, Spanish labdanum, myrrh, oak moss and opoponax come under this heading. In the case of benzoin, balsam peru and balsam tolu, discoloration may be attributed to traces of vanillin contained in these balsams. The colorless essences do not give discoloration and can be substituted in the case of white soap. They constitute excellent fixatives especially for floral bouquets.

Castoreum liquid absolute, when used pure, sometimes brings, after standing ten to fifteen weeks, a slight yellow tinge, but if used in small quantities, 2 to 4% of a formula, as is generally the case, we do not believe the discoloration to be sufficiently noticeable in white soap to prevent its use. Spanish labdanum and myrrh darken after standing, but are excellent in colored soap as they retain their odor and are good fixatives for other ingredients. The distilled essences practically do not discolor when used in small amounts.

Oak moss is made in several grades, some of which contain large amounts of chlorophyll, and outside of their own color, communicated to white soaps, turn gradually brownish or grayish because of the combined action of light and alkalies. Opoponax behaves in a similar manner to myrrh. Green ciste and French labdanum, outside of their own colors, do not become darker or change color. They are lasting and stable fixatives.

Olibanum did not discolor in the tests we conducted though some of our friends said they noticed at times, a slight discoloration. We would say that if the gum is pure, properly cleaned and purified, it does not discolor. The distilled essences do not change color either.

Orris does not discolor and is very stable. Styrax North American does not discolor and communicates a pleasant, balsamic odor to the soap. Styrax Honduras

has a much more powerful odor and gives similar results. Styrax Asiatic is coming into disregard as it is generally inferior in quality to the two other products mentioned above. It is, nevertheless, still in use on account of its low price. All the styrax products are very stable and do not discolor soaps.

Special mention should be made of the distilled essences which can be used in white soaps to replace the soluble resins when they give discoloration or contain too much natural color. These products are many times stronger than the soluble resins and though more expensive, represent dollar for dollar, very excellent value.

TESTING odoriferous products in soaps is a long and tedious process. Only a very few of the largest soap manufacturers have undertaken the series of tests it involves. Many concerns have been afraid of the expense and time it takes, though the value of such a work is obvious and would permit the correction of many soap perfume formulæ which are basically wrong. This would also permit the elimination from these formulæ of products which have no soap perfume value as they are not alkali fast or are apt to discolor. These products may be advantageously replaced by more stable fixatives and bring great improvements and savings to soap manufacturers.

The data that we are presenting has been carefully checked by some of our perfumer friends. Results, sometimes, have been found different from our own and for this reason we think it necessary to bring to the attention of our readers, outside factors that may affect results.

In the case of aromatic chemicals, results obtained have in general, always been comparable because they are well standardized and of uniform quality. Nevertheless, as the competition is keen and the prices very low, some manufacturers frequently offer for sale, products which are insufficiently purified and sometimes adulterated, which will naturally affect results. For instance, benzyl acetate, not free from chlorine, will form yellow spots in white soaps. Esters and phenols stored in drums or tins will frequently pick up traces of iron which will produce brownish or yellowish spots.

Artificial musks, principally xylene and ambrette, have been frequently incriminated by soap manufacturers as spotting white soaps. In the case of xylene musk, this is due to an impurity, namely trinitroxylol, which is very often found in this product when not properly purified. A good way to ascertain if the musk contains trinitroxylol is to dissolve a few crystals of musk in alcohol, then add a few drops of caustic soda in 10% solution. If the musk contains trinitroxylol, a strong blue color is immediately produced, which turns brown. If there is no trinitroxylol, the solution remains colorless and the musk will not discolor white soaps.

This same test, with a dilute solution of caustic soda, can be carried with other products and other musks. The appearance of a coloration will be a fair indication that the product tested will discolor white soaps as soaps are always slightly alkaline and react about the same way as a dilute solution of caustic soda.

In the case of essential oils, we have always endeavored to obtain samples of oils of the greatest purity. This is not always the case in practice, as commercial grades are rather irregular in quality. Moreover, essential oils also vary in quality according to climatic conditions, country of origin, methods and processes used for their distillation. They may also pick up during storage, impurities that may cause discoloration. This has been particularly the case with oil of lavender, which has been held responsible for discoloring white soaps. Oil of lavender in ageing, develops acidity which attacks drums or cans where the oil is stored and these traces of metal produce discolorations. This may also happen when iron kettles or milling machines are not kept in prime condition.

Terpenes, or essential oils, containing large amounts of terpenes, will almost always cause trouble in soaps as terpenes oxidize easily, particularly when traces of alkali and water are present as is the case in soap and when they are in an extreme state of dispersion as is also the case. They help to produce rancidity and turn the perfume into a bad odor. For these reasons, they should be absolutely avoided.

Soaps containing an excess of alkali will naturally turn perfume into bad odors very quickly.

In the next issue, Mr. Chaleyer will analyze by groups in tabular form the characteristics of essential oils, aromatic chemicals resins, resin essences, etc. used in soap perfuming. These analyses will cover discoloration, odor change in soaps, lasting index, odor intensity, odor value, and numerous other factors observed in a long series of experiments and in years of practical perfuming.—The Editors.

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Naugatuck to Market Aromatics

Naugatuck Chemical Co. announces the organization of an Aromatics Sales Service Department to work directly with its factory and laboratories, at Naugatuck, Conn., and to market the company's aromatic products. Burton T. Bush, head of Bushfield, Inc., who have been acting as sales representatives for Naugatuck for the past two years, has joined the Naugatuck Chemical Co. as manager of the new division. His headquarters are now at 1790 Broadway, New York. The company has decided to increase the number of aromatics now being manufactured and to utilize further their thirty years of organic chemical experience in the manufacture and importation of additional products, particularly natural flower products, for the soap and toilet preparation industries. Specialties heretofore sold by Bushfield, Inc., will hereafter be manufactured and sold under the Naugatuck label.

OIL LAVENDER FLOWERS
OIL YLANG YLANG
OIL VETIVERT BOURBON

WE offer you these oils *direct* from the source of origin.

OIL LAVENDER FLOWERS is obtained from *our production unit* in PUBERCLAIRE.

OIL VETIVERT BOURBON from *our production unit* in SAINT-DENIS, Reunion Islands.

OIL YLANG YLANG from *our production unit* in the COMORO ISLANDS.

The fact that we are *producers* of these oils, places us in a *unique* position when we are called upon to guarantee their *purity*.

Outstanding *Since* 1768

ANTOINE CHIRIS COMPANY
147 - 153 Waverly Place, New York

Production Units

Main Factory: GRASSE, FRANCE

L'ABADIE, France	VIGONE, Italy	BAMBAO, Comoro Is.
LE VIGNAL, France	AVOLA, Italy	SURABAYA, E. I.
PUBERCLAIRE, France	BOUFARIK, Algeria	LANGSON, Tonkin
BARREME, France	SOUSSE, Tunis	CHUNG-KING, China
LA ROQUE-ESCLAPON	ANTALAHA, Madagascar	TATSIENLU, China
RAHMANLARE, Bulgaria	SAINT-DENIS, Bourbon Is.	CAYENNE, Fr. Guiana
LES HESPERIDEES, Reggio, Italy		MESSINA, Sicily

"Young man, our founder himself selected this package!"

Frankly, the buying public does not care whether your package was designed by the founder, the janitor, or the office cat. On the retail shelf and in the hands of the consumer, it stands or falls on its own merits

How Right Is *Your* Package?

By Joseph B. Lawson

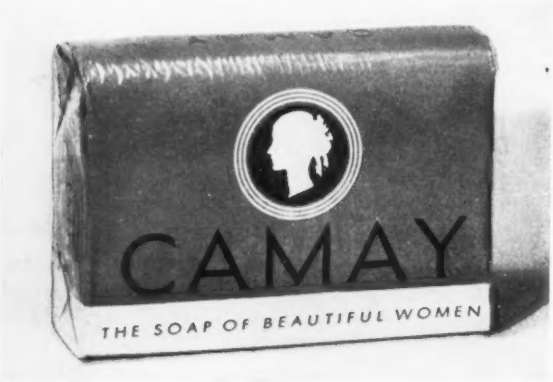
THE world is full of people who are willing to turn the searchlight upon the affairs of everybody, but when it comes to themselves—that's different. Packages are no exception to the rule. How often have you heard of the manufacturer who refuses to consider revamping his age-worn style of package "for fear he will lose the good will which has become attached to the old package through years of use," or because it has always been used for "the original and genuine,—accept no other"? Fear of losing the old trade, the old identity, the old prestige, are, of course, the chief obstacles to package change. But in this day and age, with change in business methods sweeping over us like a tidal wave, have they got a leg to stand on?

The cartoon shown above was lifted from a recent advertisement of a well-known closure manufacturer. In our mind, it epitomizes the mental attitude of the type of manufacturer who is going to suffer most from the keen edge of competition in the months and years immediately ahead of us. A closed mind, plus smug self-satisfaction, on the part of its management is the most hazardous situation which any business can face today. Because the founder of your business designed

Modernization of the old-type household ammonia bottle. The shape and style of the new bottle on the right give the impression of one-third to one-half greater content than the old. The new bottle is much easier to handle. It also has corrugated sides to overcome slipping when held by a wet hand. The rubber stopper has been replaced by a modern Amerseal Cap

your package is no reason why it should be held in reverence and awe, and inviolate from change. Frankly, the buying public does not care whether it was designed by the founder, the janitor, or the office cat. On the retail shelf and in the hands of the consumer, it stands or falls on its own merits,—and you will not be there to hang it with laurel or explain its shortcomings.

If your best friends will not tell you when you have halitosis, why do you expect them to take a chance on losing your friendship by telling you that your package is not so good? Your employes don't dare tell you!



A striking redesign in wrapper preceded the announcement last year of Camay as a five-cent toilet soap. Aquamarine green wrapper with yellow stripe and black lettering. The first nationally advertised toilet soap to use an outer wrapper of cellophane

So what's the answer? Don't ask your friends or your employes. Get somebody to ask somebody else who is supposed to know something about packages. Or go to a package man, or to three or four of them. Spend a few days browsing around in retail stores studying the packages on the counters. Buy a dozen or so competing packages and fix up a miniature display for your office. Don't be too proud to abandon your own "original" idea when you see a better one. In fact, few basic ideas are original in themselves. It is their application in which originality plays the leading role.

THE whole trend of package revision during recent years has been toward greater simplicity in design, greater ease in opening and resealing, and facilitation

An adaptation of the oval fibre can to a shaker-top package for powdered hand soap. Full paper label in silver and green. Brass finish top and bottom. Can by Sefton

in use of the product. The movement has been away from package complications and trick gadgets. The package which requires a plumber's tool kit to open and a college degree in mechanical engineering to use, is distinctly passe. Good looks are vitally essential today in a package, but they are not all. We have seen good *looking* packages closed with cheap screw caps which would defy the strong-man-of-the-circus to remove by hand. We know of a household (our own) where an old-fashioned nut cracker is kept on hand in the kitchen for the express purpose of removing these stubborn caps from bottles and jars. We have seen packages where the contents are supposed to be removed and used a teaspoon at a time, and yet the

A proposed package for three cakes of better grade toilet soap. A soap dish of waterproof Durez moulded compound forms the base of the package, the set-up paper slip cover fitting down over the whole and resting on the shoulders of the base. Or the base and soap may be wrapped in cellophane and the paper cover eliminated. A cross between a gift package and the utilitarian appeal of a handy soap dish. Designed by Simon de Vaulchier

mouths of the containers,—both cans and jars,—were not wide enough to permit the insertion of a teaspoon. We have seen beautifully designed wrappers for toilet soap put on in such a manner as to destroy completely the neat and fresh effect of the wrapper. We have seen steel pails of shampoo base where it has been a physical impossibility to remove all of the contents.

Packaging errors today are not all confined to the old-fashioned container. Some of our newest and most modern packages might well stand an inspection under the searchlight. Good old horse sense still plays as important a part in package design as it does in everything else. Art, beauty, color, attention value and the like are all for naught if Mrs. Jones gets the can of polish home and cannot open it,—or having opened it, cannot remove the contents easily.

NOW, there is another angle to this package business which, although it shows the other side of the picture, is worth thinking about. It has to do with *too much* tinkering with packages. Where some manufacturers seem willing to sit back contented with an inadequate package, others appear to have gone slightly balmy on the subject of change. Package revision with them seems to have become a merry whirl, likely to make the consumer as well as themselves dizzy. May be overemphasis in certain sections of the trade press and class journals of the country on this subject of packaging has put some manufacturers in a whirl. Possibly repeated package change has sprung from desperate efforts to meet new and more aggressive competition and to stem the tide of declining sales. Regardless of the reasons, too many changes in package are probably just as bad as no change at all. Here again, good common sense and sales judgment have got to be the guiding influence.

To get back to the subject of package correctness, it might be pointed out that hit-or-miss redesign does not ordinarily give satisfactory results. Nobody can tell you how right or how wrong your package is unless they are well versed by experience to judge competently. Consult with one or two manufacturing specialists,—perhaps ones with whom you are not now doing business. The fact that you are perfectly content with your package as it is, means nothing. You may be right, and then again, you may be wrong. Give them an opportunity to diagnose the case. Submit the findings to an unbiased jury, without any interference by you, and see what you can find out. Their verdict may be worth considerable to your sales department.

Simple and effective jelly shampoo jar. Predominating label color is deep orange with black, and some white. Closure is double shell metal cap by Armstrong

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Samuel S. Fels, president of Fels & Co., Philadelphia, has written on "Work and Worklessness" in the February issue of *Survey Graphic*, the first of three articles on the present depression, unemployment and their causes. Mr. Fels proposes a federal trade system to regulate profits as apportioned between capital, management, and labor, as a means of enlarging consumption, maintaining production, and supplying employment.

MUNN

NEWPORT PALE WOOD ROSIN

NEWPORT

A clear, uniform wood rosin imparts smoothness and uniformity to the soap. Munn Pale Wood Rosin is 100% uniform. It could not be otherwise because of the way it's made. Furthermore, all Munn comes from the same identical source. Most important of all—no rosin can be cleaner than Munn Pale Wood Rosin. There isn't a particle of foreign matter in a ton of it. The Newport processes of manufacture predetermine that, too. You can *always* get Munn—shipped on a net weight basis.

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Say you saw it in SOAP!

The Case of Coconut Oil—Politics or Science?

(Part II)

By J. D. Craig

Spencer Kellogg & Sons

No American agriculturist is deliberately producing any oil or fat for use in the production of soap. All oils and fats when recoverable in their natural prime condition are suitable for edible purposes and as such command correspondingly higher prices. The manufacture and distribution of soap at low cost is dependent upon a supply of oils and fats which have deteriorated from their virgin condition. Thus, the manufacture of soap at reasonable prices is based upon the ability of the soapmaker to use oils and fats of all kinds which have so deteriorated in quality as to unfit them for food. The American soapmaking industry receives practically no oils and fats from American producers except refuse oils and fats, not suitable for edible usage.

In order to incorporate in the soap the required qualities which the consumer demands in the way of abundant lathering, rapid rinsing, thorough cleansing properties, and instantaneous solubility at comparatively low temperatures, frequently in hard waters, it is necessary to have present appreciable quantities of the sodium soaps of the lower molecular weight fatty acids.

Coconut oil and palm kernel oil (See chart Pgs. 26-27, Jan. 1932 issue *Soap*) are the only fats containing these low molecular weight fatty acids, neither of which fats can be produced in continental United States. Tallow, palm oil, hydrogenated whale oil, and menhaden oil, together with some of the refuse and off-quality domestic produced vegetable oils comprise the principal soapmaking fats and oils, excluding, of course, coconut oil and palm kernel oil. For the purpose of our comparison, greases can be considered to have compositions varying between that of lard and tallow.

None of the important soapmaking fats and oils contain any fatty acids with molecular weights below that of palmitic acid. On the other hand, you will observe that coconut oil and palm kernel oil are made up almost entirely of the lower molecular weight fatty acids, beginning with myristic, followed by lauric, capric, caprylic, and caproic acids; none of which are present in any of these other fats and oils. Stated differently, the composition of coconut oil is made up of no more than 14% of those fatty acids which constitute more than 97% of the composition of these other more important soapmaking fats, like tallow and greases, and these same soapmaking fats contain only insignificant amounts of the other less common, lower molecular weight fatty acids which comprise 86% of the constituents of coconut oil. It is apparent that a mere reference to the physical and chemical constants of the oil is inadequate to convey the real differences between the oils or the indispensable place occupied by coconut oil in the soap formula. Too much emphasis cannot be placed upon the importance of understanding these differences when we hear so much discussion from incorrectly informed individuals pertaining to the subject of interchangeability of oils.

Of course, the composition of whale oil and menhaden oil in their virgin conditions is radically different from that of tallow, palm oil, or other domestic produced fats, but through the process of hydrogenation the composition of whale oil is made to conform very closely to that of tallow, in that its unsaturated fatty acids are converted into saturated fatty acids and its titre accordingly increased to any point desired by the soapmaker. When the chemist is through with it, for all intents and purposes, it may be considered as having a composition not radically different from that of our other more important soapmaking fats and oils, but certainly in no way can it be made to resemble the composition of coconut oil; hence, cannot impart the same characteristic properties to a soap obtainable only through the use of coconut oil in the formula.

Since the American fish oil interests have been enlisted in the cause to liberate the Philippines for the purpose of placing a tariff on our imports from them, primarily coconut oil and copra, it should be pointed out to these fish oil producers that the use of marine oils in the soap formula requires a correspondingly larger percentage of coconut oil than would be the case if the hard fat portion of the formula were made up of tallow or palm oil. For purposes of general discussion, the composition of menhaden fish oil may be considered practically the same as that of whale oil. Each oil contains essentially the same fatty acids, there being only minor differences in the ratios. In the composition of whale oil, there is a high percentage of an unsaturated fatty acid of eight double bonds, which upon hydrogenation is converted into behenic acid.

Because of the much higher molecular weight of this fatty acid, consequently lower degree of solubility in comparison with palmitic and stearic acids, a larger ratio of coconut oil must be used with it to produce a soap of normal solubility.

It is quite apparent that the soap industry has passed the stage when its public will be satisfied with any saponified fat for soap. Almost without exception, every consumer when buying a cake of soap expects a specific product for a specific purpose. After all, it seems almost ridiculous to tell an audience of soap people anything about the special properties imparted to soap by coconut oil. In fact, the need of coconut oil in the production of our modern soaps is so obvious that it seems almost absurd to argue the point.

The point which I do want to drive home, however, is that these simple facts are not clearly understood by many scientifically trained men or by those individuals who are clamoring for this and that tariff protection against the importation of these tropical oils. The responsibility, therefore, falls upon us to see that this information is conveyed to those misinformed individuals who seek through artificial means to change or to modify some of our more important fundamental laws of economics and in so doing not only violate economic principles, but attempt to oppose the laws of science. The statement that "pigs is pigs" may be true, but the statement that oil is oil and all oils may be interchanged at will is very definitely *not* true as is revealed by a study of the fundamental differences in the composition of these fats and oils.

AFTER seeing that there is a very genuine difference between coconut oil and the other fats and oils commonly used in the manufacture of soap, it might be of interest to refer briefly to some of the special properties imparted to soap by the incorporation of coconut oil. As I have already stated, it must appear to the layman that fats and oils are all alike because they are all saponifiable, have iodine numbers, titres, melting points and specific gravities. Therefore, they must be interchangeable.

From some of the assertions which have been made, many of them appearing in the press, I am led to believe that even some scientific men labor under this misapprehension. However, I am sure you will agree that a pathologist or a physiological chemist, who has never conducted research work having to do with the function of coconut oil in soap, is not necessarily a scientist to whom tariff advocates should go in their endeavor to obtain reliable and accurate information pertaining to the unique positions occupied by the different individual fats and oils in the soap industry. The fact remains, however, that anyone with a knowledge of the technology of soap and edible fats who classes coconut oil as interchangeable with domestic fats, is certainly not using the word "interchangeable" in its customary sense.

If any analysis were made of the leading brands of soap, the result would unquestionably show the prominent modern toilet soaps, the white laundry bars, the popular granulated soap chips, flakes, and beads are all made with substantial amounts of coconut oil, or an oil of the same chemical constitution,—the only important one being palm kernel oil. The consumer evidently prefers soap containing oil with these peculiar characteristics as during recent years there has been a very pronounced trend towards the white laundry soap bar and more recently towards the form of chips, flakes, and beads, for which some positive force must be responsible.

We all know there have been many distinct changes in the form of wearing apparel. Rayon and silken garments enjoy much wider use than formerly. At the same time, the old back yard cistern, clothes boiler, and washboard have largely disappeared. In the first place, these modern silken and rayon fabrics, so extensively worn, cannot be safely washed at high temperatures either in the commercial laundry or in the wash boiler, or will they stand a lot of harsh mechanical action necessary to remove dirt when the washboard is employed. The washing of fine rayon and silken fabrics is generally done at low temperatures and with a minimum of mechanical action. The soap is, therefore, called upon to remove most of the dirt. To provide efficient performance under these conditions, the soap must be easily soluble at the lower washing temperatures to produce quick foaming and copious suds, combined with the property of easy rinsing. Of course, there are other soft oils like corn oil, olive oil or cottonseed oil, which might be used to increase solubility to some extent, but they would give soaps of poor body, soft and of poor sudsing value, which in the hard waters would produce a very undesirable gummy curd or scum, difficult to remove. If ironed in the garment, as much of it would be, objectionable odors and discoloring of the fabric would result. In the first place, coconut oil makes the soap very easily rinsed from the garment, but if any of it should remain in the fabric, there is less likelihood of these objectionable odors coming out after the garment has been ironed. The performance required of the cake of toilet soap is not materially different from that required of the laundry soap.

A RECENT government survey of water supplies in cities and large towns of the United States has shown that over 15,000,000 of our people are compelled to use water which is classed as definitely hard. If we add to this number, other millions living in smaller communities and on farms where the water supply is also hard, it is readily apparent that a very large proportion of our population has to be content with hard water, and they must, therefore, have a soap which will give satisfactory and efficient performance under these difficult conditions. Furthermore, in these hard water territories, it is desirable to incorporate with many

soaps a certain amount of some alkaline filler which will tend to soften the water with a very material saving in the soap consumed and decidedly more satisfactory cleansing results. Hardness in water is a great destroyer of soap, every grain of hardness rendering useless about ten grains of ordinary soap. A characteristic property of coconut oil soap, or soaps high in coconut oil content, is that they will carry such alkaline fillers without a falling off or breaking down of the structure of the soap itself. In fact, it would be impossible to manufacture such alkaline filled hard water soaps if it were not for the liberal use of coconut oil.

Although soaps can be made without coconut oil, there is not a soap user in the country who would not be disappointed with the product if he were forced to use it. The high degree of inefficiency and poor adaptation to the consumer's specific uses as compared to the modern soaps containing liberal quantities of coconut oil he has been accustomed to using, would be very distinctly noticeable. All of us should be vitally interested in the formulating of soaps of a high degree of efficiency and utility, yet which can be sold at reasonable prices, but if the price of coconut oil is inflated through an ill-founded tariff application, the consumer will be considerably inconvenienced and caused no small degree of discomfort while the industry will suffer from consumer dissatisfaction and reduced consumption.

A DISCUSSION of the scientific factors relative to the use of coconut oil in the manufacture of soap is incomplete without a brief consideration of certain fundamental economic aspects in order that you can readily see that scientific factors, not economic considerations, have very largely governed the use of coconut oil in soap.

Briefly stated, the United States exports only fats and oils of *edible* grade, but imports only fats and oils of *industrial* grade, except within limits too narrow to be practical. The inference is that the importation of these foreign oils and fats is injurious to the cattle industry, but it is hard to find any economic background for such a statement. The surplus of oleo oil, oleo stearine, and edible tallow when not consumed in the United States at far higher prices than the prices at which industrial oils and fats are sold, is exported at these same higher prices to European countries.

The tallow and greases going into the industrial products such as soap, lubricating compounds, stearic acid, etc., actually have very little relationship to agriculture. It is true when the farmer marketed his livestock, the tallows and greases were a part of the animal on the hoof, but the farmer sold the entire animal at the meat price and the packer in turn sold the tallow still on the meat to the butcher at the meat price. Except for an insignificant portion of offal which is left in the abattoir, practically all of the tallow is left on the carcass. The average 1,000 pound steer yields, at the packing plant, less than 10 pounds of inedible tallow and grease available for soap manufacture, the remainder of the fat being either recovered and used for edible purposes or sold with the meat at the meat price and the consumer pays the retail meat price for all of it.

Slightly more than 70% of the inedible tallow and grease production comes from the rendering plants, produced from the scraps collected from the butcher shops, hotels, and restaurants. It must be apparent that the renderer who supplies over 70% of one of our most important soapmaking fats, tallow, has absolutely no relationship to the livestock producer, and were a tariff to be placed on oils and fats deemed to be competitive with the renderer's product, there is not a remote possibility that the livestock grower would get a penny of it.

THE Bureau of the Census has very carefully compiled detailed statistics showing the consumption of each important fat and oil in each of the various channels through which they move into consumption and likewise showing the production of each of the important commodities in which these fats and oils are consumed. I have accordingly from these statistics prepared a table showing the quantities of soaps produced and the quantities of coconut oil and palm oil consumed in the production of these soaps during the two years for which the statistics are available, namely 1929 and 1931.

	1929	1931
Hard Soap Manufacture (Bars, chips, flakes, beads, powders, etc.)	2,250,663,402	2,098,969,595
Liquid Soap	35,263,195	28,955,385
	2,285,926,597	2,127,924,980
Quantity of Coco Oil Consumed	393,000,000	371,000,000
Quantity of Palm Oil Consumed	178,215,300	185,353,000
Ratio of Coco Oil Consumed to Total Soap Produced	17.2%	17.4%
Ratio of Palm Oil Consumed to Total Hard Soap Produced	8.0%	9.0%

Although at first glance it would appear that the consumption of coconut oil declined in 1931 as compared to 1929, it will be found by the use of simple arithmetic that the actual quantity of coconut oil consumed to the quantity of soap produced is larger in 1931 than in 1929. The ratio of coconut oil consumed to soap produced increased by .2%, from which it is apparent that the ratio of coconut oil in the soap formula did not decrease in face of the very interesting observation that the price of coconut oil throughout the year, 1931, remained substantially higher than that of tallow. Ac-

(*Turn to Page* 57)

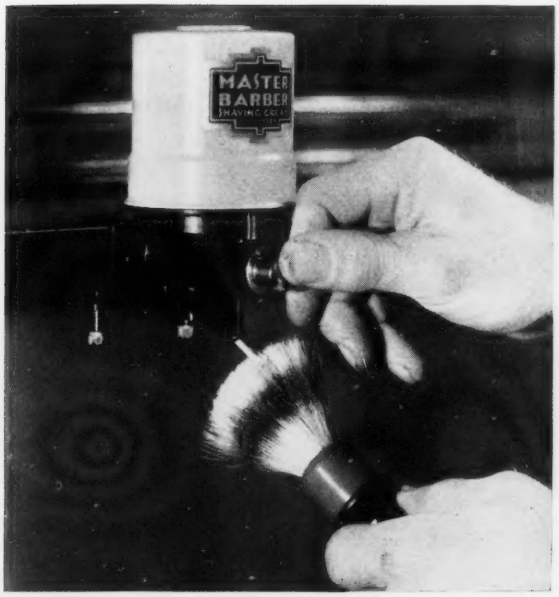
When you write

● Even such a routine activity as writing can be related to our business here at American Cyanamid & Chemical Corporation; for the products we make and sell are so varied that they reach into almost every industrial field, and from there into an incredible number of the simple commodities used in daily living. In *your* industry, our products have a specific place; and because of this "breadth" of our interests, we can serve you intelligently and thoroughly

AMERICAN CYANAMID & CHEMICAL CORPORATION

535 FIFTH AVENUE · NEW YORK

Say you saw it in SOAP!



New Products and Equipment

IN order to facilitate dispensing of shaving cream in the average barber shop, and to encourage the use of creams in place of powdered shaving soaps, the Master Barber dispenser has been developed by the Norton Laboratories of Lockport, N. Y. The advantages of the new type dispenser for shaving creams, according to the manufacturer, are greater speed and sanitation, and the practicable use of creams which some barbers prefer. The device clamps to the fixture shelf in front of the barber's chair. Wax-paper refills are set into the base. A push on the plunger ejects a ribbon of cream. The base is moulded from black Durez, and the cover is of light colored plastic material. Advantages over metal are held to be lighter weight, bright scratch-proof finish, and the elimination of corrosion and discoloration.

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A new wrapping machine for soaps, capable of handling three cakes in a single cellophane wrapper in the position shown in the illustration, is the latest machine to be turned out by the Johnson Automatic Sealer Co. of Battle Creek, Mich., a subsidiary of the Battle Creek Bread Wrapping Machine Co. The cakes are fed three abreast as shown on an intermittent intake chain. From this point on, the wrapping is entirely automatic. The cellophane is fed from a roll, cut and located in position for wrapping, the three cakes are lifted and placed on the sheet, wrapped, heat sealed, and ejected on a belt from which they are taken by an operator and placed in shipping boxes.

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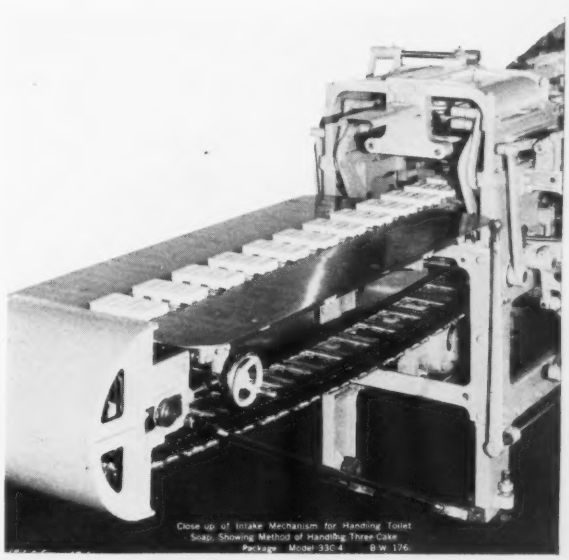
The Puget Sound Chemical Co. has been organized in Seattle, Wash., to manufacture soaps, shampoos and other toilet preparations. The concern is capitalized at $15,000.

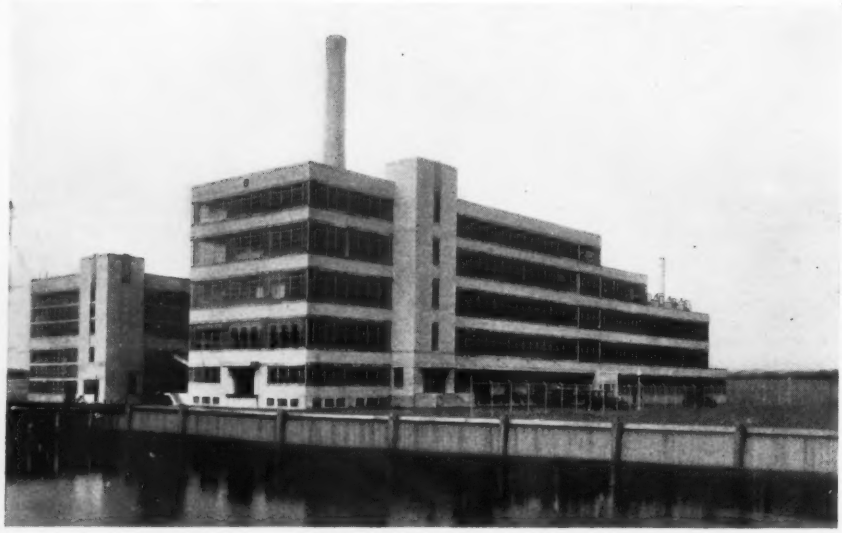


Close up of Intake Mechanism for Handling Toilet Soap, Showing Method of Handling Three Cake Package. Model 33C 4 . . . B W 176.

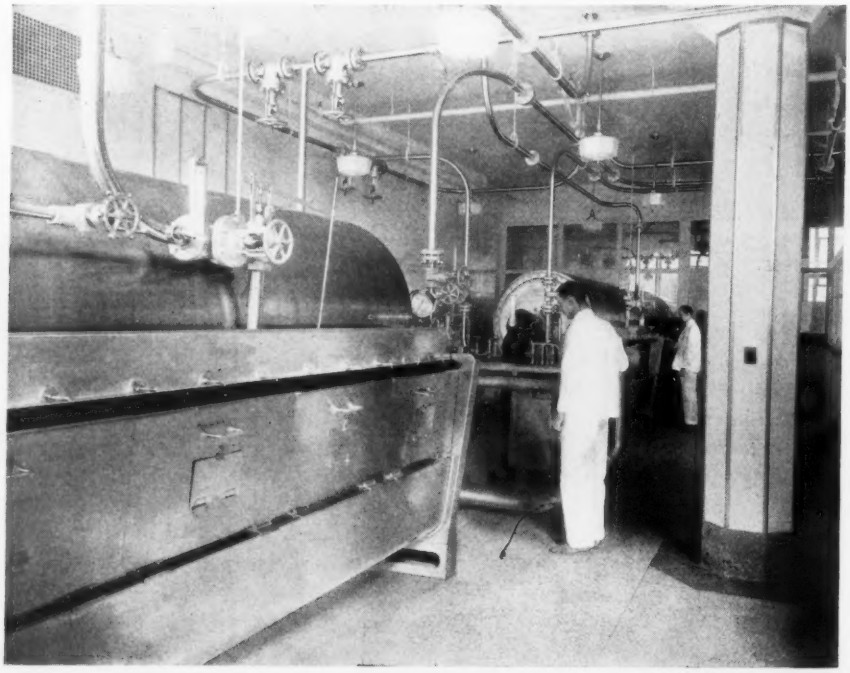
New Lever Shortening Plant

THE new fatty edible products plant of the Lever Brothers Co. located at Edgewater, N. J. is now in production on edible oils and the new Lever shortening product, *Covo*. The new factory located on deep water on the Hudson River opposite 125th Street, New York City, and on the West Shore Railroad, is reported to be the world's most modern shortening plant. This marks the first venture of the well-known Lever soap interests in the edible field in the United States.

The plant consists of two main units, one containing refining equipment and power plant, and the other housing the finishing equipment, laboratories, offices, and shipping departments. There is a separate building for hydrogen-making equipment and a large tank colony. The exterior of the plant is in cream-colored brick. The interior has tiled walls throughout and full-window daylight layout. The equipment is said to embody the most advanced engineering ideas on edible oil refining, hydrogenation, and shortening manufacture. Air conditioning equipment for washing all air and keeping it at uniform temperature and humidity is another feature. Stainless steel piping is used throughout. Extensive control and research laboratories are maintained to check all stages of refining and manufacturing processes. The plant was built by Stone & Webster of Boston.



Lever Brothers Company new edible fatty products plant at Edgewater, N. J., on the Hudson River opposite New York City.



Chilling rolls and other equipment used in the manufacture of "Covo", the new Lever shortening, at the Edgewater plant.

P & G Earnings Lower—Cut Dividend

Net income of Procter & Gamble Co. for the six months ended December 31, 1932, totaled $4,621,700, after interest, depreciation, taxes, etc., equal to 64c a share on the common stock after dividend requirements on the preferred stock. This compares with earnings of $9,299,156, or $1.37 a share in the corresponding period of the previous fiscal year. At the meeting of directors held January 14 the quarterly dividend on the common stock was reduced from 50c to 37½c a share, putting the stock on a $1.50 annual basis. In announcing the dividend reduction, Col. William Cooper Procter, chairman of the board, said: "Many of the conditions which have adversely affected the soap industry are improved, and it is the belief of the management that the company has gone through its most difficult period. In order that our shareholders may be kept currently informed of the company's progress, quarterly statements of earnings will be issued in the future."

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Two Cleveland soap products companies which have recently gone out of business are the "A to Z Soap Products Co.," which was located on Superior Avenue, and the Lake Erie Soap Products Co., which was located at 1452 East 17th Street.

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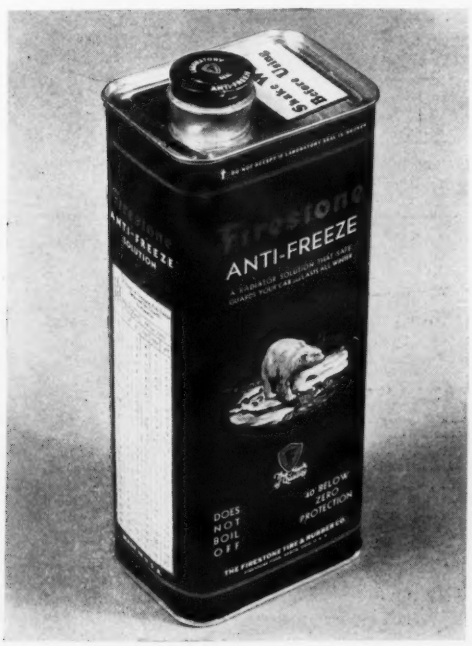

A tamper-proof cap for Firestone Anti-Freeze Solution. The closure is a Goldy seal made by the Aluminum Seal Co., New Kensington, Pa., and a specially designed Goldy nozzle made by the Williams Sealing Corp., Decatur, Ill. The closure is fitted with a tab which when pulled, tears through thin aluminum, and breaks the outer seal.

Oil Duty Out of Allotment Bill

The amendment to the Domestic Allotment Farm Relief Bill, calling for a duty of five cents per pound on all imported oils and fats and an equivalent duty on the fatty content of imported seeds and other raw materials, which was adopted by the House on Jan. 12, was automatically killed by the Senate Committee on Agriculture in the general exclusion of dairy products from the bill, when it met on Feb. 11. This amendment would have more than doubled the cost of imported fatty raw materials for soap manufacturers. It was aimed primarily at fatty materials used in butter substitutes as a means of greater protection for dairy products.

At a hearing held on the amendment, held Feb. 1 before the Senate Committee, a delegation representing soap makers and refiners of oils and fats appeared in protest against the amendment. Thomas Carless of Paterson, N. J., headed a group of olive oil soap manufacturers. Testimony was also heard from Daniel McIvers of the Original Bradford Soap Works, and John B. Gordon, Washington representative of the American Laundry Soap Manufacturers, who stated that the amendment would mean a sharp increase in laundry costs.

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Richard N. Statham has joined the staff of the Chicago office of the Industrial Chemical Sales Co. to be associated with John Harris, Chicago manager. Mr. Statham is a son of Noel Statham, president of the company. He is a graduate of Dartmouth College and was previously associated with the company's laboratories at Covington, Va.

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W. E. Armstrong Chemical Corp., Columbus, has been incorporated by J. W. Evans, J. L. Drouillard, and R. L. Winkler. There are 250 no par shares. The company will make soaps and related products.

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E. A. Bergholtz, for a number of years chief chemist with the supply and specifications division of the American Telephone & Telegraph Co., New York, died of pneumonia on Feb. 3 at his home in Hillsdale, N. J. Mr. Bergholtz was well known for his work on the specifications for liquid soaps, soap dispensers, insecticides, and allied products.

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Ungerer & Co. is now being represented in Canada by Ernest J. Harper, formerly of the firm of Harper-Mantle Co., Toronto. Prior to its dissolution in 1932, Harper-Mantle Co. represented Ungerer in Canada. Mr. Harper is located at 62 Lombard St., Toronto.

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Bost, Inc., New York, maker of "Bost" toothpaste, has turned advertising of this product over to United Advertising Agency, New York.

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Roger & Gallet, New York, have recently occupied new and larger offices at 500 Fifth Avenue.

Terpineol, C. P.

Water White—Fine Odor—One of the Best
Low Cost Odors for Soaps, Fly Sprays,
Deodorizing Blocks, etc.

Menthol Crystals

Synthetic

White Crystals with Fine Natural Odor for
mentholated shaving creams, soaps,
shampoos, lotions, creams

Thymol U.S.P.
Prime White Crystals

Camphor
Synthetic

Products of SCHERING-KAHLBAUM, A. G., Berlin

SHERKA CHEMICAL CO., INC.

New Address: 75 WEST STREET, NEW YORK, N. Y.
Telephone: BOwling Green—9-7482
Sole Importers for the U. S. A.

SOAP PERFUMES

We offer you a full line of high class soap perfumes at reasonable cost, all of them having outstanding odor value. We invite you to ask us for samples, and to try them out in a proportion of 1 : 100. You will be amazed at the results obtained.

CHYPRE SAVON	LAVENDER SAVON
HELIANTHINE SAVON	LILAC A SAVON
ISYLA SAVON	ORIGANOL SAVON
JASMIN BASE SAVON	TEA ROSE SAVON

and many others

Also special odors for:

THEATRE SPRAYS, LIQUID SOAPS, SHAVING CREAMS, DISINFECTANTS

POLAK'S FRUTAL WORKS, INC.

350 W. 31st St. New York City

CHICAGO BRANCH—16 South Peoria St.

Say you saw it in SOAP!

CHICAGO TRADE NOTES

AT the Chicago Perfumery, Soap and Extract Association's first meeting of the year last month, Dudley F. Lum, the new president, appointed the following committees for 1932: *Legislative*, Frank T. Robinson, of Monsanto Chemical Works, chairman; E. J. Strobl, of Albert Verley, Inc.; William Lowenstein, of Bauer & Black; A. G. Fox, of George Lueders & Co.; and O. N. Davis, of U. S. Industrial Alcohol Corp. *Entertainment*, Euclid Snow, of Mallinckrodt Chemical Works, chairman; H. E. Dunning, of American Commercial Alcohol Corp.; A. G. Schneider, of Victor Chemical Works; and Chris Christensen, of Chas. Pfizer & Co. *Membership*, William H. Schutte, of P. R. Dreyer, Inc., chairman; C. A. Hammond, of F. N. Burt Co., Ltd.; C. A. Seguin, of Acme Powder Puff Co.; George A. Briggs, of Allen B. Wrisley Co.; and L. A. Solo, of Solo Laboratories. *Golf*, E. F. Smith, of American Aniline Products Co., Inc., chairman; G. M. Van Kirk, of Hazel-Atlas Glass Co.; A. J. Dedrick, of Albert Verley, Inc.; A. C. Drury, of A. C. Drury & Co.; and William G. Moore, of Dodge & Olcott Co. *Bowling*, Ray A. Morris, of Orbis Products Trading Co., Inc., chairman; Paul H. Pettit, of Lady Grey Co.; Martin B. Vance, of Givaudan-Delawanna, Inc., Alvin M. Burgh, of Marcelle Laboratories; and A. J. Andersen, of Richard M. Krause, Inc. *Publicity*, J. E. Wolfe, of Neumann-Buslee & Wolfe, Inc., chairman; H. Helfrich, of Helfrich Laboratories; Joseph De Lorme, of Riviera Products Co.; Joseph A. Gauer, of Fritzsche Brothers, Inc.; and George H. Woods, of Frank Z. Woods Co.

Plans for the new year announced by Mr. Lum included a projected arrangement for closer cooperation with the Associated manufacturers of Toilet Articles, of New York, for purposes of discussion and action on taxation and other legislative matters. A meeting was also planned at which the attendance was to be secured of those who originally organized the association in 1909. A series of speakers was also projected, the first of whom appeared at the meeting of February 7, when William W. Welch, a tax expert, spoke on present conditions of taxation. Further meetings, Secretary W. Kedzie Teller announced, will be held on the first Tuesday of each month at the Hamilton Club.

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W. T. Raleigh, president of W. T. Raleigh Co., of Freeport, Illinois, who suffered an illness lasting several months, recovered sufficiently to return to his desk late in January.

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David A. Bennett, president of Albert Verley, Inc., spent the past month in California, conferring with his agents, the Mefford Chemical Co.

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E. M. Tysdal, recently appointed manager of the Chicago branch of Ungerer & Co., has moved the offices to 325 W. Huron Street, where full stocks of merchandise will be kept. Mr. Tysdal will have charge of sales throughout the midwest territory. He was formerly in charge of the St. Louis office.

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To fill the vacancy left by the resignation of C. E. Van Vleck, Mrs. Eleanor I. Johnson has been elected to the board of directors of Colgate-Palmolive-Peet Co.

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The Institute of Certified Beauticians held a beauty ball at the La Salle Hotel, Chicago, on the evening of January 28. Coiffures, modes of make-up and other aspects of appearance of the present and past ages were passed in review before a large, appreciative audience consisting mainly of professional operators. Entertainment and dancing followed. Arrangements were under the supervision of A. J. Gunne, president, and Miss Leta M. Alton, vice president.

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No new director has been chosen by Swift & Co. following the retirement of Louis F. Swift as a director. He had been with the company for 47 years, filling the office of president from 1903 to 1932. No successor was elected to fill his place or that of Edward F. Swift, who died last year, and the board will now consist of nine members.

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Open New Cin-Made Sales Office

The Cin-Made Corp., Cincinnati, formerly the Cincinnati Mailing Device Co., which has just completed one of the most successful years in its history, will undertake a program of expansion in 1933, according to A. J. Harris, general manager. Additional sales offices will be opened and representatives put in the field during the next two months which will give the company complete coverage of all parts of the United States, Canada, and Mexico. A new district sales office has recently been established at 608 S. Dearborn St., Chicago, under the management of George H. Treviranus.

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Soviet to Increase 1933 Soap Output

Thus far, the soap production of Soviet Russia has lagged far behind other manufacturing groups under the Five Year Plan, state advices from London, and 1933 will see strong efforts to push up the output and make up for lost ground. The Soviet Union Rubbish Trust, it is understood, will exercise great care in husbanding all waste fats and garbage greases. This is to increase the available fats for the soap kettle without cutting into the available supplies of edible oils and fats. The Commissariat of Light Industry has promised a considerable additional number of skilled workers and specialists for the soap factories this year.

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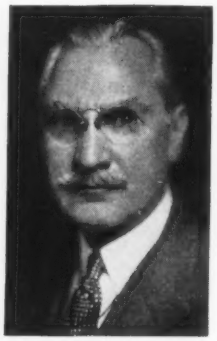
Nusheen, Inc., New York, has turned over advertising of its hair rinse and shampoo to Arthur Rosenberg Co., New York.

Weicker Heads Essential Oil Assn.

The Essential Oil Association of U. S. A., at its annual meeting, held at the Hotel Astor, New York, on January 10th, elected the following officers: — President, Herman G. Weicker, vice pres., Dodge & Olcott Co.: vice president, Dr. Eric C. Kunz, treas., Givaudan - Delawana, Inc.; secy-treasurer, Fredk. W. Stichweh, sec., James B. Horner, Inc. These officers, together with A. D. Armstrong, secretary of Fritzche Brothers, Inc., and Joseph B. Magnus, vice president of Magnus, Mabee & Reynard, Inc., comprise the executive committee of the Association for the calendar year of 1933.



Herman G. Weicker

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Drug-Chemical Dinner March 16

The Eighth Annual Dinner for the Chemical, Drug and Allied Trades will be held on Tuesday evening, March 16 at the Waldorf-Astoria Hotel, New York, under the auspices of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, and with the cooperation of some twenty-five other associations and trade groups, according to an announcement by Frank J. McDonough, president of the New York Quinine & Chemical Works, and chairman of the section. This annual dinner is usually the outstanding event of the year from the point of attendance and representation. Close to 800 attended last year. Representative groups from many leading cities in the Middle West and East attended last year, and are expected again this year. The speakers have not been announced as yet.

Associated with Mr. McDonough in arranging the dinner are V. E. Williams of Monsanto Chemical Works, and B. J. Gogarty of the Rossville Commercial Alcohol Corp. in charge of reception, Gustave Bayer of Merck & Company in charge of publicity, and S. W. Fraser of Burroughs, Wellcome & Co. Reservations and seating are in charge of Ray C. Schlotterer, secretary of the section, 41 Park Row, New York. Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., recently elected president of the New York Board of Trade, is cooperating actively with the dinner committee. Several hundred reservations have already been made.

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Plans for the twenty-second annual meeting of the American Drug Manufacturers Association at Hot Springs, Virginia, May 8 to 11, are progressing under the direction of Nicholas H. Noyes, president of the association, and it is now proposed to start the general sessions on Tuesday, May 9, instead of on Wednesday as in previous years.

SECURITY PRICES

PRICES of stocks of soap, chemicals, insecticide, and allied companies as quoted on the New York Stock Exchange, Curb Exchange, other exchanges and over-the-counter are given in the following table. This table of prices is compiled monthly for *Soap* by a representative of one of the oldest and best-known brokerage houses in New York.

	High 1932	Low 1932	Jan. 3 1933	Feb. 1 1933
Allied Chem.	897/8	421/2	81	843/4
Am. Agric. of Del.	151/2	31/2	91/2	83/8
Amer. Cyan. "B"	81/2	15/8	41/8	41/4
Armour of Ill. "A"	23/4	5/8	11/2	11/2
Bon Ami "A"	55	31	517/8	543/8
Brillo	85/8	4	4	61/2
Colgate, P. P.	311/2	101/4	123/8	121/8
Consolidated Oil Co.	9	4	51/2	51/4
Corn Prod.	563/4	243/4	531/2	541/2
Coty	73/8	11/2	4	35/8
Dow Chem.	40	211/2	31	33
Drug, Inc.	57	23	36	341/2
Du Pont	593/4	22	367/8	375/8
Glidden	103/8	31/8	5	51/2
Gold Dust	205/8	81/4	15	141/2
Gulf Oil	443/4	23	261/2	261/4
Int. Agri.	31/2	1/4	11/4	1
Lehn & Fink	241/4	6	18	181/4
Mathieson	207/8	9	153/4	163/8
McKess. & Rob.	61/2	11/8	25/8	23/8
Monsanto	31	133/8	28	301/4
Proc. & Gam.	423/4	197/8	287/8	251/8
Shell Union	83/4	21/2	53/8	41/2
Sher. Will	35	131/2	141/2	151/2
S. O. of Cal.	317/8	151/8	241/4	24
S. O. of Ind.	251/8	131/8	213/4	201/2
S. O. of N. J.	373/8	197/8	30	255/8
S. O. of Ohio	301/8	151/2	20	19
Swift & Co.	22	65/8	71/2	73/4
Union Carb.	363/8	151/2	251/2	261/4
Westvaco	125/8	3	61/4	8
Wilson & Co.	13/4	5/8	7/8	11/4

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The dividend on Drug, Inc., common stock has been reduced by the directors to an annual basis of $3 a share, from $4, the next installment being payable March 1 to stockholders of record February 14. The action of the directors conserves cash for the company's extensive national advertising campaign which has lately been increased by the addition of a new liquid antiseptic to the Vick line.

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Magnus, Mabee & Reynard, Inc., New York, have issued a new catalog and price list of essential oils, aromatics, etc., as of February, 1933.

P. C. Magnus Heads Board of Trade

Percy G. Magnus, president of Magnus, Mabee & Reynard, Inc., New York, and for a number of years chairman of the drug, chemical and allied trades section of the New York Board of Trade, was elected president of the New York Board of Trade at a meeting of the managing directors held January 19. Among the members of the directing board are S. B. Penick of S. B. Penick & Co., H. G. Weicker of Dodge & Olcott Co. and C. Leith Speiden of Innis, Speiden & Co. Francis J. McDonough, New York Quinine & Chemical Works, succeeds Mr. Magnus as chairman of the drug, chemical and allied trades section of the board, S. B. Penick is treasurer and H. G. Weicker is a member of the executive committee.

P. C. Magnus

F. J. McDonough

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In a recent issue of *Soap* it was incorrectly noted that Oklahoma Equipment Co., Oklahoma City, had moved to 516 West Grand Avenue from 215 South Compress Street. The Oklahoma Equipment Co. is still at Compress Street, the concern which made the move to West Grand Avenue being the Sanitary Equipment Co. Although located at the same address for a short period, the two concerns are not connected.

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Sharples Specialty Co., Philadelphia, has introduced a new centrifugal separator which is said to work particularly well on liquids containing high percentages of slurry precipitates. The excessive bowl cleaning necessary on other centrifugals is said to be eliminated with the new Sharples "Rotojector Centrifugal."

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National Toilet Co., Paris, Tenn., maker of the "Southern Flowers" and "Nadine" toiletries, declared a 20% dividend at its annual meeting in January, and was also able to transfer a substantial sum to its surplus account.

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The business of Roessler & Hasslacher Chemical Co. is now being conducted as a department of E. I. du Pont de Nemours & Co., being known as the R. & H. Chemicals' Department. A quarterly price list has recently been issued. Early in January a branch office was opened at 300 West First Street, Charlotte, N. C.

J. B. Williams Plans Canadian Plant

J. B. Williams Co. of Glastonbury, Conn., through its Canadian subsidiary, J. B. Williams of Canada, Ltd., plans to establish a plant at Ville Lasalle near Montreal for the manufacture of soap products. Construction of the three-story factory is scheduled to begin on April first. The plant will cost $45,000 and will employ about 25 local residents in addition to other help, reports state. At a special meeting of the Ville Lasalle town council on Jan. 28, presided over by Mayor Louis Chatelle, a reduction of fifty per cent in the annual property taxes of the company was granted for a ten year period beginning Jan. 1, 1934. The plant will be of brick and concrete and will be situated on Lasalle Boulevard, West. The tax reduction by-law was submitted to a vote of the townspeople on Feb. 8.

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Mechanic's Hand Soap Taxable

According to a ruling by R. M. Estes, Deputy Commissioner of Internal Revenue at Washington, made in response to a request by A. L. Bobrick, president of the Bobrick Manufacturing Co., Los Angeles, mechanic's hand paste is taxable at five per cent as a toilet soap under the Revenue Act of 1932. The communication of Mr. Estes to Mr. Bobrick stated:

"Reference is made to your letter of December 6, 1932, relative to the tax imposed under the provisions of section 603, Revenue Act of 1932. You are advised that soap is taxable whether in the form of a liquid, semi-liquid, paste, flake, powder, or cake. Soaps and soap powders advertised or held out as suitable for toilet purposes or for application to the body, or parts of the body, as cleansing agents are taxable. A soap used chiefly for removing grease and stains from the hands, though capable of incidental use for other purposes, is taxable as a toilet soap.

In the opinion of this office the mechanic's soap manufactured by you and used to remove grease, paints, etc., from the hands, is a toilet soap within the scope of section 603 of the Revenue Act of 1932, and is therefore subject to tax at the rate of 5 per cent of the price for which so sold."

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Gimbel Bros. department store, New York and Philadelphia, has opened a test bureau where merchandise will be tested for lasting qualities, purity, concentration, etc. Soaps and toilet preparations are expected to come under the scope of the new bureau at a slightly later date. Tests will be conducted semi-publically, and all results will be publicly announced.

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A voluntary petition in bankruptcy was filed by the McCrory Stores Corp., New York, January 14, filed by involuntary bankruptcy action by several creditors on January 16. Other creditors are reported to be working for a reorganization of the business which is said to have quick assets of about $6,500,000.

COLUMBIA BRAND

98% - 100%
CAUSTIC SODA
76% Na_2O
Solid – Flake
Ground – Liquid

99% - 100%
SODA ASH
58% Na_2O
Light–Dense
Feather

THE COLUMBIA ALKALI CORPORATION
Executive Sales Offices, EMPIRE STATE BUILDING, NEW YORK CITY
Branch Sales Offices
431-451 St. Clair St., CHICAGO; Carew Tower, CINCINNATI; Santa Fe Terminal Bldg., DALLAS
BARBERTON, OHIO

GERANIOL for SOAP

In various grades to meet every requirement as to price

A. M. TODD COMPANY
KALAMAZOO, MICH.
Business established in 1869

PERSONAL AND IMPERSONAL

Los Angeles Soap Co. has recently reduced the price of "White King" granulated soap by 50c. a case, resulting in a drop in the retail price of the 40 oz. package to 27c. carton in the Los Angeles market. The company has announced its intention of refusing to sell retailers who sell below the 27c. price.

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Carmen Co., New York, is reported to be ready to start construction of a $125,000 soap plant at Boonton, N. J., for the production of soap specialties. The building is to be built adjacent to the plant of Wecoline Products Co., which will supply raw materials for the soap plant.

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J. Eavenson & Sons, Camden, N. J., is now offering a complete line of soaps for the beauty shop, the latest move in the sales campaign being an offer of a free 25c. bar of "Evon" cold cream soap. The bar is cut into 16 pieces, conveniently packed for beauty shop use. Other items in the line include shampoo base, bar shampoo, medicated shampoo and granulated castile soap.

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At the annual meeting of Albany Soap Corp., Albany, N. Y., held early in January, Joseph Grober was elected president and general manager of the company, other officers chosen being: Wm. C. Schopman, first vice-president; Joseph Nicklas, second vice-president; Wm. H. Geier, assistant manager; John H. Rea, treasurer; and Harry J. Geier, secretary.

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The office of the Windsor Soap Co., formerly located at Oneida and Bond Streets, Buffalo, has been moved to 344 Delaware Street.

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The Wildroot Company, Buffalo, is establishing a branch plant in Fort Erie, Ont., from which to supply its Canadian trade. A Canadian company known as Wildroot, Inc., has been formed to operate the plant.

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Laurel Soap Mfg. Co., Philadelphia, has appointed a new distributor in Charlotte, N. C., the American Brokerage & Warehouse Co., 505 S. Cedar St.

—o—

Colgate-Palmolive-Peet Co. has introduced a new olive oil shampoo soap for beauty parlor use. Sales to beauty shops are being handled by Manning O'Connor of the toilet goods division.

Charles S. Pearce, president of Colgate-Palmolive-Peet Co., in a recent interview, stated that the adoption of the five-day week has made possible an increase of 7% in the number of employees on the company payroll this year, as compared with 1932.

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Dr. K. A. Pelikan has joined the technical staff of W. F. Fancourt & Co., Philadelphia, manufacturers of textile soaps, oils and specialties, in charge of research and development. Dr. Pelikan, who received his Ph.D. from Goettingen University, Germany, also studied at Heidelberg and Koenigsberg Universities. He has been engaged in industrial research in oils, emulsions, soaps, and plastics for the past twenty years.

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Maid-O'-Kelp Co., Seattle, Wash., has started the manufacture of kelp soaps and shampoos. The company has absorbed the Puget Sound Chemical Co. and is incorporated for $15,000. O. Rappe is chief chemist. A. C. Girard is general manager. The kelp soap products have been used for some time in the textile trade.

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Dr. Samuel A. Goldschmidt, chairman of the board of Parsons Ammonia Co., died at his New York home on January 28.

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A. W. Peet, chairman of the board of Colgate-Palmolive-Peet Co., has been re-elected president of the Kansas City-Missouri River Navigation Co., Kansas City.

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The team representing E. R. Squibb & Sons in the New York Wholesale Drug Trade Bowling Association was in second place in league standing as of February 2, with 28 games won and 14 lost. The Carbide & Carbon Chemical Co. team was in first place, with 29 victories and 13 defeats.

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T. E. Hicks, formerly sales manager of Johnson & Johnson, New Brunswick, has been made vice-president in charge of merchandising, being succeeded as sales manager by Arthur B. Hill, formerly of the Chicago office.

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Western Bottle Mfg. Co., Chicago, distributor of "Dr. West's" toothpaste, has been ordered by the Federal Trade Commission to discontinue representing that this product is the only one of several toothpastes that can be used safely or without injury to the teeth. This as-

sertion, made in a number of ways, was found to be false and misleading.

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James M. Wilde, Jr., has been placed in charge of the newly formed hotel sales division of Solvay Sales Corp. Mr. Wilde was formerly with the Faspray Corp., Red Bank, N. J., makers of dishwashing machinery.

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Larkin Co., Buffalo, has changed its capitalization to 50,000 shares of no-par common stock and 50,000 shares of $100 preferred, instead of 200,000 shares of common and 200,000 shares of $100 preferred.

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Nacto Cleaner Corp., New York, maker of "Nacto" fabric cleaner, has turned its advertising account over to John O. Powers Co., New York, advertising agent.

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R. C. Baker office manager of Colgate-Palmolive-Peet Co., Chicago, spoke on "Branch Office Economies" at a meeting of the American Management Association held in the Palmer House, Chicago, February 6.

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Gleam Products Corp., New York, are now marketing *Lustro*, which they designate as "the perfect polishing powder" for porcelain, mirrors, metals, woodwork, and composition floors. The new package carries a red and white label on grey background.

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Pittsburgh Cleanser Corp., New York, announces that George C. Schmidt has resigned his connection with that company. A. A. Herschler has been elected president. At the same time, the company again pointed out that it has no connection whatever with the Pittsburgh Chemical Co. and that no officer or executive of the Pittsburgh Cleanser Corp. is or has been associated with the other concern. Mr. Herschler's plans for developing the firm's business include concentrating sales efforts on specialties like the "Briquette," for washing machines, and the "Neutralizer," for destroying offensive odors, rather than engaging in the sale of a more or less complete line of sanitary specialties, as in the past. The company recently moved to 350 W. 31st St., New York, from Brooklyn.

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The Peerless Chemical company, manufacturers of soaps, chemicals and allied lines, Des Moines, has added 30,000 square feet of floor space to its present manufacturing and storage facilities. The plant at present, running to capacity production, is 10 days behind orders, according to J. W. Perkins, president.

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Kendall Mfg. Co., Providence, has instituted a sampling campaign for "Soapine." Each housewife will receive two full-size packages and three coupons.

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Armand, Ltd., Canadian subsidiary of Armand Co., Des Moines, has just moved into new quarters at East Windsor, Ont. The new plant has doubled capacity and will manufacture Armand products for all countries of the British Empire.

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Colgate-Palmolive-Peet Co. is reported to be carrying on rather extensive alterations at its Jeffersonville, Ind., and Kansas City, Mo., plants having recently awarded contracts totaling approximately $200,000.

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The plant of Cunningham Cleanser Corp., Bronx, N. Y., was partially destroyed by fire early in January, damage being estimated at $10,000. The company manufactures soap powder, the loss being principally in the form of destruction of stored stock.

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"Mickey Mouse" soap is being introduced by Manhattan Soap Co., New York. The well-known hero of the animated movie cartoons is featured on the soap wrapper and on the display carton.

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Los Angeles Soap Company presented gift boxes of soap and perfume to guests attending a recent dinner party of the Sales Managers' Association of Los Angeles.

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Cowles Detergent Co., Cleveland, is marketing a new cleaning and detergent product under the name of *Clenesco F. P.* The new product is anhydrous sodium metasilicate, covered by Patent No. 1,774,872 and others.

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Albert R. Fay, manager of shipping and transportation activities for Swift & Co. until his retirement in 1926, died January 22 at Pasadena, Cal.

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Ungerer & Co., New York, have announced the following officers for 1933: Frederick H. Ungerer, president; Charles Fischbeck, vice-president and treasurer; Kenneth G. Voorhees, vice-president; and Milton S. Butler, secretary.

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R. B. Foster, European representative for the Colgate-Palmolive-Peet Co., was a golf partner of the Prince of Wales recently at the Coombe Hill Golf Club, near London, when the Prince won the weekly club medal competition with a score of 81. Mr. Foster is a member of the club.

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Procter & Gamble Co. has renewed its lease on a tract of fifteen acres adjacent to its Ivorydale, Ohio, soap plant, the renewal calling for an annual rental of $2,000 and an option to buy at $40,000. The land has been leased by the company for the past fifteen years, being acquired for water rights.

—o—

J. Eavenson & Sons, Camden, N. J., have recently expanded their soap plant by the addition of another kettle house, and a new building for the toilet soap department and warehouse.

CONTRACTS AWARDED

Braun-Knecht-Heimann Co., San Francisco, has recently been awarded a contract for a quantity of naphthalene for delivery to the Fort Mason, California, U. S. Army Quartermaster at a price of 5.45c. Newell-Gutradt Co., San Francisco, awarded quantity of leather soap at 3.5c.

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John T. Stanley Co. has been awarded the contract for 26,400 lbs. laundry soap for the Brooklyn U. S. Army Quartermaster at a price of 3.98c. American Fluoride Corp. awarded 15,400 lbs. laundry soda at 95/100c. H. Kohnstamm & Co. awarded 4,000 lb. laundry sour at 6.375c.

—o—

Colgate-Palmolive-Peet Co., Chicago, in a recent Fort Sam Houston U. S. Army Quartermaster's bidding, was awarded the contract for 60,000 lbs. laundry soap at 2.55c. Also awarded: 1,320 lbs. laundry soap at 3.25c.; 5,040 lbs. at 3.23c.; 3,000 lbs. at 3.25c.; 3,600 lbs. at 3.25c.; 840 lbs. at 3.25c.; and 20,040 lbs. at 3c.; Day & Frick, Phila., awarded 3,000 cakes grit soap at 3.25c. and 8,000 11 oz. cakes grit soap at 2.8c. Procter & Gamble Distributing Co., Dallas, awarded 4,260 lbs. laundry soap at 3.47c. Armour & Co., San Francisco, awarded 18,180 lbs. laundry soap at 2.516c. and 480 lbs. at 2.516c.

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Beaver-Remmers-Graham Co. was awarded the contract for 265 boxes of toilet soap for Chelsea, Mass., in a recent U. S. Treasury Supply Division bidding, at a price of $4.29 a box. Contracts on 53 drums of sweeping compound went to Dustbane Products Co. at $1.95 drum, and to John C. F. Snyder & Sons at $2.50 drum. Contracts on sal soda were awarded to Star Soda Products Co. at $2.80 barrel and to Crystal Soap & Chemical Co. at 3.7c. pound.

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Crystal Soap & Chemical Co. and Kranich Soap Co. were low bidders on 140 cartons of castile soap for the Veteran's Administration Procurement Division, Washington, in a recent bidding with a quotation of $168. Other bids and bidders were: Jas. Good, $173.60; S. W. Rundle, $210; Chas. L. Huisking & Co., $175; Conray Products Co., $179.20.

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Newell Gutradt Company, San Francisco, has been awarded contract to supply the West Coast Navy yards with 800,000 pounds of salt water soap.

Safeway Stores and Piggly Wiggly, one of the largest grocery chains in northern California, featured a "Soap Sale" late in January, offering Palmolive, Crystal White, Ivory and Supersuds at special prices. The sale was effective two days, in San Francisco, Daly City and South San Francisco.

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Fire last month caused $50,000 damage to the plant of the Stockton Soap Company, Stockton, Calif.

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Appoint A. M. T. A. Committees

H. H. Bertram, president of the Associated Manufacturers of Toilet Articles has recently announced the personnel of the association's standing committees for the current year, among the members being the following:

Legislative: J. D. Nelson, Andrew Jergens Co., D. J. Mulster, Ferd. Mulhens, Inc.

Tariff: J. A. Handy, Larkin Co., E. B. Hurlburt, J. B. Williams Co., Dr. Martin H. Ittner, Colgate-Palmolive-Peet Co., Edward V. Killeen, George Lueders & Co., Dr. E. C. Kunz, Givaudan-Delawanna, Inc., H. G. Weicker, Dodge & Olcott Co.

Domestic Production Floral Products: Dr. Martin H. Ittner, Colgate-Palmolive-Peet Co., Paul M. Todd, A. M. Todd Co., Dr. R. S. Swinton, W. J. Bush & Co., F. E. Watermeyer, Fritzsche Bros., Inc.

Research: J. A. Handy, Larkin Co.

Resolutions: W. L. Schultz, Lightfoot Schultz Co., Daniel J. Mulster, Ferd. Mulhens, Inc.

Trade Practices: Cecil Smith, Yardley & Co., Richard Stern, Ferd. Mulhens, Inc.

Convention Entertainment: Charles Fishback, Ungerer & Co., Edmund Hoffman, American Can Co., E. M. Kaylor, Metal Package Corp., H. C. Seaman, Armstrong Cork & Insulation Co.

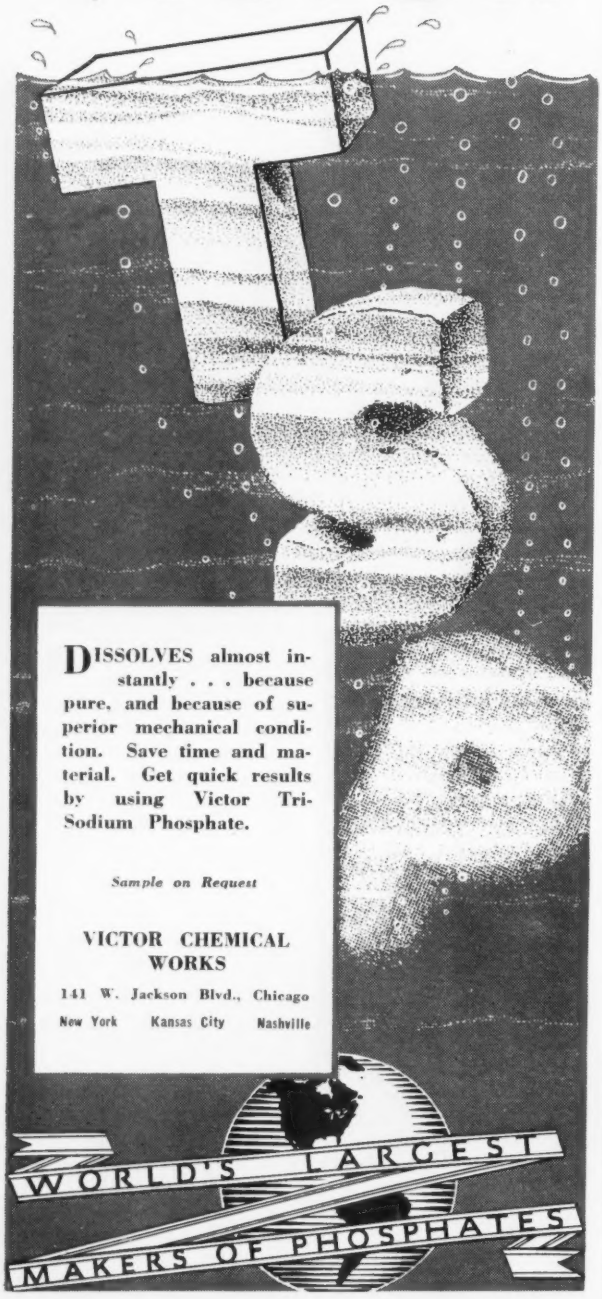
Finance: D. J. Mulster, Ferd. Mulhens, Inc., W. L. Schultz, Lightfoot Schultz, Inc.

Transportation: J. E. Wilson, Larkin Co., L. D. Snow, Lever Bros. Co., C. D. Dooley, Colgate-Palmolive-Peet Co.

Importations: Edward V. Killeen, George Lueders & Co.

Odorgraphia: Dr. F. D. Dodge, Dodge & Olcott Co., Dr. Ernest S. Guenther, Fritzsche Bros., Inc., J. A. Handy, Larkin Co., Dr. R. S. Swinton, W. J. Bush & Co., A. H. Ingalls, Colgate-Palmolive-Peet Co., Dr. M. Szamatolski, Givaudan-Delawanna, Inc.

Instantly soluble VICTOR


DISSOLVES almost instantly . . . because pure, and because of superior mechanical condition. Save time and material. Get quick results by using Victor Tri-Sodium Phosphate.
Sample on Request
VICTOR CHEMICAL WORKS
141 W. Jackson Blvd., Chicago
New York Kansas City Nashville
WORLD'S LARGEST
MAKERS OF PHOSPHATES

"Incredible...

says Watson

that but eight Pylam colors are needed to produce the variety of shades used in this soap factory."

"Elementary, Watson," replies Holmes.

And it takes him but a few minutes to relieve Watson's incredulity.

With formulae and eight *free* samples provided by Pylam, you can see quickly how these eight harmoniously working colors will produce any shade in your plant in any type soap.

You will have "brought home" to you the economy of stocking these eight colors over the burdening of your color room with package after package of mixed dyestuffs.

Write for *free* samples of the

PYLAM STRAIGHT EIGHT LINE

Pylam Products Co., Inc.

Manufacturing Chemists — Exporters — Importers

799 Greenwich Street New York

Say you saw it in SOAP!

RECORD OF TRADE-MARKS

The following trade-marks were published in the January issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Marks Filed

ACCELEROL—This in solid letters describing soap ingredient. Filed by Fischer's Surfa-Saver, Inc., Cincinnati, Nov. 18, 1931. Claims use since Oct. 7, 1931.

ULTRALYN—This in solid letters describing cleaner. Filed by Ultralyn Essential Products Co., New York, June 21, 1932. Claims use since Nov. 12, 1930.

J-CO—This on carton with drawing of gnomes doing cleaning, describing cleaning powder. Filed by De-O-Ez Products Corp., Rochester, Oct. 13, 1932. Claims use since Oct. 5, 1932.

BODYGARD—This in solid letters describing toilet soap. Filed by Goldblatt Bros., Inc., Chicago, Nov. 5, 1932. Claims use since Dec. 15, 1931.

GOLDBLATT BOND—This in outlined script describing shaving cream. Filed by Goldblatt, Bros., Inc., Chicago, Nov. 5, 1932. Claims use since July 15, 1932.

GERMIFUME—This in solid letters describing germicide, disinfectant and deodorant. Filed by Onota Chemical Co., Pittsfield, Mass., May 21, 1932. Claims use since Oct. 1, 1916.

FAIM—This on reverse plate describing insecticides. Filed by Gelco Co., Brooklyn, Sept. 21, 1932. Claims use since September, 1929.

O-DO-SEPTIC—This in solid letters describing deodorant. Filed by O-Do Co., Dallas, Oct. 6, 1932. Claims use since Mar. 1, 1932.

RAT-BOMBS—This in solid letters describing rat poison. Filed by B. J. Moore Sons' Co., Utica, Oct. 7, 1932. Claims use since Dec. 27, 1931.

THRIFTY CRYSTALS—This in solid letters describing cleaner. Filed by Falkenhagen Mills, Philadelphia, Oct. 13, 1932. Claims use since Aug. 23, 1932.

SUNDAY TOOTH WHITENER—This in solid letters describing tooth paste. Filed by Sunday Co., New York, Oct. 14, 1932. Claims use since Aug. 15, 1932.

SPEE-DEE—This in solid letters describing cleaner. Filed by O'Connell Products Co., Chicago, Oct. 27, 1930. Claims use since June 24, 1930.

ECONOMY WHITE—This in solid letters describing laundry soap. Filed by Iowa Soap Co., Burlington, Iowa, Sept. 24, 1932. Claims use since Aug. 17, 1931.

SILVER STAR—This on circular reverse plate describing shoe polish. Filed by Reliance Wax Products Corp., Los Angeles, Oct. 26, 1932. Claims use since Mar. 18, 1932.

SCRAM—This on reverse plate describing scouring compound. Filed by Fraksin Laboratories, San Francisco, Oct. 27, 1932. Claims use since Sept. 1, 1932.

TRUXO KLENZER—This in solid letters describing cleaning compound. Filed by Trux-O Chemical Co., Kansas City, Nov. 1, 1932. Claims use since Sept. 1, 1932.

ANTISO—This in solid letters describing soap. Filed by Colgate-Palmolive-Peet Co., Chicago, Nov. 18, 1932. Claims use since Nov. 8, 1932.

HOLIDAY—This in outline letters describing soap. Filed by Calite Mfg., Co., Los Angeles, Nov. 29, 1932. Claims use since Apr. 7, 1932.

AZAMINE—This in solid letters with seal describing antiseptic and germicide. Filed by Rare Chemicals, Inc., Nepera Park, N. Y., Sept. 21, 1932. Claims use since Sept. 1, 1927.

BARI-CIDE—This in solid letters describing insecticides. Filed by Barium Reduction Corp., Charleston, W. Va., Nov. 5, 1932. Claims use since Sept. 28, 1932.

CABO—This in solid letters describing insecticides. Filed by Southeastern Chemical Co., Alexandria, Va., Nov. 8, 1932. Claims use since February, 1932.

ADORIA—This in solid letters describing dentifrice. Filed by Kaufmann Department Stores, Inc., Pittsburgh, Nov. 25, 1932. Claims use since Sept. 19, 1932.

FLUFFY SUDS—This in solid letters describing soaps. Filed by Bowles Bros. Co., Los Angeles, Nov. 30, 1932. Claims use since July 11, 1932.

N'AMEL—This on carton describing tooth paste. Filed by Independent Druggists' Alliance Distributing Co., Chicago, May 23, 1932. Claims use since Jan. 2, 1932.

NEVITE—This in solid letters describing washing soda. Filed by Buckeye Soda Co., Painesville Twp., Ohio, Nov. 17, 1932. Claims use since Nov. 4, 1932.

GOLD BOND—This in solid letters describing shaving soap. Filed by Bond Mfg. Corp., Wilmington, Dec. 7, 1932. Claims use since Aug. 31, 1932.

ELECTRIC MOTH BOMB—This in script and solid letters with drawing of device plugged into socket, describing fumigating apparatus. Filed by Electric Moth Bomb Co., New York, Oct. 15, 1932. Claims use since Apr. 21, 1932.

NAPTOSIDE—This in solid letters describing insecticidal chemicals. Filed by Hammond Paint & Chemical Co., Beacon, N. Y., Oct. 21, 1932. Claims use since Sept. 1, 1932.

PEST KIT—This in solid letters describing insecticidal chemicals. Filed by Hammond Paint & Chemical Co., Beacon, N. Y., Oct. 21, 1932. Claims use since Sept. 1, 1932.

SKAT-A-RAT—This in solid letters describing rodent exterminator. Filed by Skat-A-Rat Corp., Providence, R. I., Oct. 27, 1932. Claims use since Dec. 15, 1931.

SANI SKALP—This in solid letters describing oil shampoo. Filed by Sani-Skalp Co., Beverly Hills, Cal., Nov. 5, 1932. Claims use since Apr. 24, 1930.

PERBODENT—This in solid letters describing tooth paste and mouth wash. Filed by Perbodent Laboratories, New York, Nov. 12, 1932. Claims use since June, 1932.

TEN SECONDS—This in solid letters with drawing of face of stop-watch, describing dentifrice and antiseptic. Filed by Park Laboratories, New York, Nov. 18, 1932. Claims use since Sept., 1931.

BOR-O-SAN—This in solid letters describing antiseptic. Filed by York Pharmacal Co., St. Louis, Nov. 19, 1932. Claims use since Apr. 4, 1932.

RADO—This in solid letters on label describing cleanser and polish. Filed by Ardo Hering, New York, Dec. 24, 1931. Claims use since Dec. 19, 1931.

FORMULA-T—This in solid letters describing brushless shaving cream. Filed by Samuel Tinsky, Brooklyn, Oct. 17, 1932. Claims use since September, 1931.

PLYMOUTH—This in solid letters with pilgrim woman's head, describing soaps. Filed by Plymouth Products Co., Syracuse, New York, Dec. 9, 1932. Claims use since May 16, 1932.

CHAIN LIGHTNING—This in solid letters describing shoe polish. Filed by Geo. J. Kelly, Inc., Lynn, Mass., Sept. 24, 1929. Claims use since Sept. 5, 1916.

JULIP—This in solid letters describing tooth paste. Filed by Reiss-Premier Pipe Co., West New York, N. J., Oct. 14, 1932. Claims use since Sept. 22, 1932.

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Trade Marks Granted

299,929. Floor Waxes and Varnishes. Cromar Co., Williamsport, Pa. Filed July 23, 1932. Serial No. 329,014. Published October 18, 1932. Class 16.

299,932. Automobile Polish. Admiral Products Co., Brooklyn. Filed June 20, 1932. Serial No. 328,143. Published October 18, 1932. Class 16.

299,946. Wax Preparations for Floors. Congoleum-Nairn, Inc., Kearny, N. J. Filed August 23, 1932. Serial No. 329,768. Published October 18, 1932. Class 16.

300,016. Insecticide. Brazilian Insecticide Co., Brooklyn. Filed August 26, 1932. Serial No. 329,850. Published October 25, 1932. Class 6.

300,018. Dental Powder. Samuel Albert, New York. Filed August 18, 1932. Serial No. 329,728. Published October 18, 1932. Class 6.

300,020. Antiseptic. Fownide Laboratories, Los Angeles. Filed August 8, 1932. Serial No. 329,408. Published October 18, 1932. Class 6.

300,021. Antiseptic and Germicide. Hachmeister-Lind Co., McKees Rocks, Pa. Filed August 1, 1932. Serial No. 329,261. Published October 11, 1932. Class 6.

300,025. Antiseptic and Germicide. Grace G. Orr, San Pedro, Calif. Filed June 11, 1932. Serial No. 327,960. Published October 18, 1932. Class 6.

300,167. Shampoo. Phoenix Oil Co., Cleveland. Filed July 26, 1932. Serial No. 329,094. Published October 18, 1932. Class 6.

300,168. Shampoo. Phoenix Oil Co., Cleveland. Filed July 26, 1932. Serial No. 329,093. Published October 18, 1932. Class 6.

300,173. Insecticides. Nourse Oil Co., Kansas City, Kans. Filed June 23, 1932. Serial No. 328,249. Published October 18, 1932. Class 6.

300,181. Antiseptic and Deodorant. Godissart & Pyles, Hollywood, Calif. Filed July 30, 1932. Serial No. 329,232. Published October 25, 1932. Class 6.

300,192. Disinfectant and Insecticide. Bullen Chemical Co., Folcroft, Pa. Filed March 28, 1932. Serial No. 325,561. Published October 18, 1932. Class 6.

300,211. Antiseptic. Sans Souci Products Co., Los Angeles. Filed August 4, 1932. Serial No. 329,331. Published October 25, 1932. Class 6.

300,218. Metal Polish. S. C. Johnson & Son, Racine, Wis. Filed February 8, 1932. Serial No. 323,943. Published October 18, 1932. Class 4.

300,258. Liquid Floor Waxes and Polishes. Continental Car-Na-Var Corp., Brazil, Ind. Filed April 27, 1932. Serial No. 326,622. Published November 1, 1932. Class 16.

300,260. Cleaning Compound. Detergent Products Corp., Atlanta. Filed July 1, 1932. Serial No. 328,479. Published October 18, 1932. Class 4.

300,284. Cleaning Compound. Detergent Products Corp., Atlanta. Filed July 1, 1932. Serial No. 328,480. Published October 25, 1932. Class 4.

300,291. Antiseptic. Hood-Hall Chemical Co., Montgomery, Ala. Filed August 16, 1932. Serial No. 329,582. Published October 11, 1932. Class 6.

300,301. Soap Paste. Hopkins Chemical Co., Washington, D. C. Filed September 14, 1932. Serial No. 330,346. Published October 25, 1932. Class 4.

300,304. Cleaning Compound. Hyo Products Co.,

Binghamton, N. Y. Filed September 8, 1932. Serial No. 330,179. Published October 25, 1932. Class 4.

300,306. Flea Soap. Potter-Wrightington, Inc., Charlestown, Mass. Filed August 31, 1932. Serial No. 330,020. Published October 25, 1932. Class 4.

300,309. Shoe Cleaner. Pyrrole Products Corp., Portsmouth, Ohio. Filed August 17, 1932. Serial No. 329,607. Published October 18, 1932. Class 4.

300,310. Insecticidal Soaps. Abbott Laboratories, North Chicago, Ill. Filed August 17, 1932. Serial No. 329,589. Published October 25, 1932. Class 4.

300,312. Soaps, Metal Polish, Etc. Grace-Lee Products, Inc., Minneapolis. Filed August 8, 1932. Serial No. 329,401. Published October 18, 1932. Class 4.

300,354. Dentifrice. Vitadent Laboratories, Jersey City, N. J. Filed April 20, 1932. Serial No. 326,304. Published November 1, 1932. Class 6.

300,357. Shampoo. John H. Breck, Inc., Springfield, Mass. Filed September 16, 1932. Serial No. 330,392. Published November 1, 1932. Class 6.

300,359. Shampoo. Swedish Laboratories, Cambridge, Mass. Filed September 2, 1932. Serial No. 330,064. Published November 1, 1932. Class 6.

300,458. Deodorant. Puro Co., St. Louis. Filed September 12, 1932. Serial No. 330,276. Published November 8, 1932. Class 6.

300,459. Soap and Metal Polish. Metro Chemical Products Co., Brooklyn. Filed March 3, 1932. Serial No. 325,027. Published November 1, 1932. Class 4.

300,462. Tooth Powder. Rimmel, Inc., West Orange, N. J. Filed June 17, 1932. Serial No. 328,075. Published November 8, 1932. Class 6.

300,468. Cleaning Compound. P. W. Co., River Rouge, Mich. Filed August 29, 1932. Serial No. 329,943. Published November 8, 1932. Class 4.

300,473. Soap Compound. National Milling & Chemical Co., Philadelphia. Filed September 17, 1932. Serial No. 330,429. Published November 8, 1932. Class 4.

300,474. Insecticides. McLaughlin Gormley King Co., Minneapolis. Filed September 22, 1932. Serial No. 330,577. Published November 8, 1932. Class 6.

300,476. Laundry Soap. Iowa Soap Co., Burlington, Iowa. Filed September 24, 1932. Serial No. 330,627. Published November 8, 1932. Class 4.

300,550. Brushless Shaving Cream. Menth-A-Frost Products, Cleveland Heights, Ohio. Filed February 6, 1932. Serial No. 323,927. Published November 8, 1932. Class 4.

300,575. Tooth Paste. Gly-Ser-Dine Chemical Co., Milwaukee. Filed August 8, 1932. Serial No. 329,414. Published November 1, 1932. Class 6.

300,594. Insecticide, Disinfectant, and Deodorant. American Oil Co., Baltimore. Filed June 14, 1932. Serial No. 327,966. Published August 16, 1932. Class 6.

New Patents

Conducted by
Lancaster, Allwine & Rommel
Registered Attorneys
PATENT AND TRADE-MARK CAUSES
815 15th St., N. W., Washington, D. C.

Complete copies of any patents or trade-mark registrations reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 1,890,121, Process of Bleaching Soap Stock, Patented December 6, 1932, by Anthony M. Lagasse, Arlington, N. J., assignor to Stockton G. Turnbull, Arlington, N. J. The process of bleaching soap stock which comprises treating the soap stock with hydrogen peroxide in non-alkaline condition, and decomposing the excess hydrogen peroxide after the bleaching operation is completed.

No. 1,890,214, Cleaning Composition, Patented December 6, 1932 by Harry V. Churchill, Parnassus, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa. A water soluble powder for cleaning aluminum consisting of about 99 per cent of tartaric acid and about 1 per cent of an alkali metal fluoride.

No. 1,891,091, Insecticide Spray, Patented December 13, 1932 by Thomas J. Headlee, Dayton, and Joseph M. Ginsburg, New Brunswick, N. J., assignors to Tobacco By-Products & Chemical Corporation, Louisville, Ky. A stomach and a contact poison insecticide, consisting of a chemical combination of tannic acid and nicotine, known as nicotine tannate.

No. 1,391,462, Germicide, Patented December 20, 1932 by Cyrus B. Wood, Washington, D. C. A germicide for water comprising succinchlorimide.

No. 1,891,462, Germicide, Patented December 20, 1932 by Robert S. Blair, Stamford, Conn. The herein described art which consists in extruding a hollow soap member and compressing the same between dies of a temperature different from that of the soap with which they engage and thereby form a succession of hollow cakes with substantially closed ends.

—o—

E. Bontcheff & Co., Kazanlik, Bulgaria, have issued a table of which gives comparative data on rose oil production in the years, 1927 through 1932. Copies may be obtained through Dodge & Olcott Co., New York, American agents for Bontcheff & Co.

—o—

Robert F. Crooks, senior partner in Robert Crooks & Co., New York, importers of coconut and palm oils, died in Bournemouth, England, early in January, after a long illness.

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ESSENTIAL OILS
SYNTHETIC AROMATICS
COMPOUNDED PERFUME BASES
For the Soap and Insecticide Industries

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Algerian—Bourbon—East Indian

OIL GUAIACWOOD

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METHYL CINNAMATE

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"The integrity of the house is reflected in the quality of its products"

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Market Report on

ESSENTIAL OILS AND AROMATICS

(As of February 9, 1933)

NEW YORK—Quotations on essential oils and aromatic chemicals continued to exhibit their recent tendency to decline this period, with a number of reductions reported in a rather quiet market. Buying showed no increase, with users continuing to take only moderate supplies for current needs. Citronella, Ceylon, was subject to several reductions early in the period, due to lower replacement offerings. Late in the period domestic orange and lemon oils were reduced rather sharply in price to meet competition which in recent weeks has been increasingly severe. The only considerable strength exhibited was in bergamot oil where many of the extremely low quotations which have been current recently were withdrawn.

Oil Anise

Trading in anise oil has been steady, but of only moderate proportions, during the recent period, with prices unchanged.

Oil Bergamot

Prices were advanced late this period on a number of brands of bergamot oil which have been selling at unusually low prices over recent months. The market which has been as low as $1.10 on some brands came up to an inside price of about $1.30. Other brands range up to substantially higher levels.

Oil Cassia

There has been less demand for cassia oil by the soap trade lately, and prices, while unchanged, exhibit general weakness.

Oil Citronella

Spot quotations dropped two to three cents a pound on Ceylon oil early this period, following similar reductions in replacement costs. The current market for oil in drums is now about 33c pound.

Orange Oil

Domestic producers were forced to reduce quotations late this period to meet the rather strenuous competition they have been receiving lately from sellers of imported oil.

Oil Sandalwood

Sandalwood oil was the subject of competition this period with Mysore oil being held at previous levels, but other brands being offered at substantial differentials.

—o—

Blue Rose Soap is reported to have become quite a favorite in Canton, Ohio, in which it was recently introduced by the Eagle Drug Co., of that city.

Soda ash exports from United States during December, 1932, amounted to 1,522,598 lbs., valued at $25,531.

—o—

Soap Employment Down 15% in 1932

Retrenching under the influence of generally adverse business conditions, the soap industry last year was forced to cut nearly 15 per cent of its workers from the employment rosters, it is revealed in figures just compiled by the Department of Labor. The estimate is based on returns from 90 leading factories employing upwards of 13,000 workers.

The remaining employes apparently were somewhat better off in December than at the start of the year, since the total payroll of the industry dropped only about 10 per cent from the January level, indicating that some of the wages paid the employes let out was distributed among those still on the rosters.

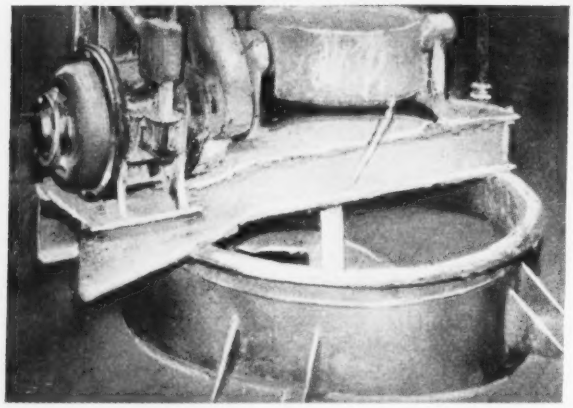
Observing the fluctuations in employment in the industry during 1932, the Labor Department saw an increase in February that was continued through the following month. April and May witnessed a recession, but the downward movement was temporarily halted again in June. July saw a falling off in employment. Then, for four successive months, more workers were put back on the job. A fairly sizable curtailment appeared again in the final month of the year, however. Payrolls showed a similar fluctuation, although the increases were not as pronounced.

The soap industry made a satisfactory showing, compared with the manufacturing industries in general, in the matter of payrolls. The manufacturing establishments of the country as a whole were forced to reduce expenditures on wages more than 22 per cent last year. Employment was down only 10 per cent, however, between January and December, 1932.

The Department's index numbers on employment and payrolls in the soap industry in 1932, based on 1926 averages as 100, are as follows:

	Employment	Payrolls
January	95.9	87.9
February	96.5	89.7
March	96.8	89.4
April	96.5	90.5
May	94.2	85.4
June	95.7	90.5
July	93.1	82.6
August	93.9	81.5
September	94.5	83.3
October	96.9	84.4
November	98.3	83.0
December	94.5	79.2

CLEARER SILICATE BETTER SOAP



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Our list includes the most efficient cleanser compounded for your particular trade.

SUPER ALKALIES

These are products which are adapted for special uses where stronger alkalies are required.

SNOWFLAKE CRYSTALS

The accepted base for quality bath crystals.

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An effective abrasive product for cleaning floors, marble, etc.

PARADICHLOROBENZENE

This exceptionally pure product is an excellent deodorant and moth preventive.

ORTHODICHLOROBENZENE

For insecticide sprays and metal polishes.

PUT Solvay quality into your packages and get more out of your private brand. Write for Booklet SC7 for particulars on products for your special trade.

SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by The Solvay Process Company

61 BROADWAY NEW YORK

SOLVAY PRODUCTS

Say you saw it in SOAP!

Market Report on

SOAP AND DISINFECTANT CHEMICALS

(*As of February* 8, 1933)

NEW YORK—There were several new developments of interest in the market for soap and disinfectant raw materials this period, chief among them being a substantial reduction in ocean freight rates from southern ports which resulted in a sharp increase in export shipment of rosin. On the north-Atlantic route, foreign freight rates were increased on a number of items, one of the results being less competition with domestic raw material suppliers on the part of foreign producers. Substantial amounts of alkalis continued to move into consuming channels, with prices unchanged.

Alkalis

Shipments of alkalis continue to compare rather well with the 1932 figures, with soapmakers taking substantial amounts for current needs. Stocks in the hands of users are believed to be rather light and most orders are placed for immediate shipment to supply current requirements.

Glycerin

Higher ocean freight rates on a number of northern-Atlantic steamship lines running to Holland and Germany have recently increased the cost of importing glycerin from these countries, lessening the competition with domestic producers. The result has been a rather firmer situation in glycerin, prices, particularly in view of the fact that soapmakers are recovering a smaller amount of glycerin from their soaps than in previous years, due to present low prices. Imports of crude glycerin during December, 1932, totaled 738,808 lbs., valued at $27,346, over 400,000 lbs. of this total coming from Cuba. Imports of refined glycerin amounted to 381,168 lbs., valued at $20,811.

Rosin

Rosin shipments picked up sharply this period due to stimulation of the export trade by the announcement of lower ocean freight rates from southern ports. Stocks were further reduced and are now almost 200,000 barrels lower than they were a year ago. In spite of these developments, however, prices went to lower levels, the pale grades being most affected. The closing schedule follows: Gum Rosin, Grade B, $2.80; H, $4.05; K, $4.30; N, $5.15; WG, $5.55; WW, $5.75; Wood, $3.43 to $3.63.

—o—

The Foragers, an organization composed of soap and cosmetic salesmen and executives, held their annual dinner at the Hotel Astor, New York, early in January.

Floor Cleaning by Spraying

A new floor cleaning method using a pressure sprayer for the application of the soap solution can save 35 per cent or more in time and labor, according to M. C. Goodrich of the Hudson Manufacturing Co., Chicago, who has made a study of the process during the past year. Discussing the new method informally, he said in part:

"Cleaning floors has been going on in about the same way for as many years as I can remember. I do not pretend to know the fine points in that business. Further, I am not referring to the cleaning jobs which require electrically-driven machines that operate on a large scale and on immense expanses of floor space. Rather, I am talking about floor cleaning jobs I have looked at in auto showrooms, office buildings, hotel lobbies, schools and similar average sized places.

"The attendant uses a pail or two, a mop (or two), soap suds and sometimes a squeegee affair. First he mixes up the soap solution. Then, he douses his mop and swishes it around within an area he can reach. Next he picks up the pail, moves it to another point and swishes some more. The next operation is to wring out the mop, after which the latter is used to wipe up the surplus from the floor just treated. Most likely he gives the mop another wringing and wipes up the same area again. This dousing, swishing, wringing, wiping and re-wiping continues until the entire floor has been done.

"Now let us look in on the 1933 method of doing the same job. The attendant mixes his soap solution in the tank of a four gallon compressed air sprayer. He pumps up the sprayer with fifteen or sixteen strokes. He walks along the floor spraying the solution in large 'swaths.' When 700 to 800 square feet are covered (2 to 3 minutes' time) he takes his then clean mop and wipes up the minute globules of soap solution. In wiping the 700 to 800 square feet, one ringing is usually necessary. The sprayer is next recharged with air (and liquid if necessary) and the same procedure is carried out.

"A careful check on time shows a 35 per cent to 45 per cent saving in favor of the 1933 method. An equally careful check on solution used shows a slight saving also. The results, however, are greatly in favor of the spraying method.

"Here is an opportunity to sell higher priced, more profitable scrubbing soap on the basis of *lower maintenance cost to the user.* Soap manufacturers need a new story for 1933. Selling on price alone has been unprofitable and uninteresting. This new idea on floor cleaning deserves some careful investigation."

Masters of One Business

SILICATES OF SODA

OUR APPRENTICESHIP in the manufacture of silicates started in the early sixties. In the passing years, much knowledge and experience have been gained in the art of making uniform silicates, and in their use in various kinds of soap.

Thus P.Q. Silicate Service can place in your hands the right silicate as well as an understanding of how its properties may assist in the solution of your particular problem. The soap maker's standard for three-quarters of a century has been "N" Brand, P.Q. Silicate, but special needs often require silicate of a different ratio. P.Q. Silicate Headquarters serve every requirement.

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We collect, render and refine all of the raw materials used in our stearic acid and red oil. This close control, not available in any other brand, insures high quality products by eliminating low grade raw materials. Let us submit samples and prices. There is no substitute for quality. Use them in your

Dry Cleaning Soaps

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TALLOW

Fatty Acids

Theobald Animal By-Products Refinery

KEARNY, N. J.

ESTABLISHED 1914

Market Report on

TALLOW, GREASES AND OILS

(*As of February* 8, 1933)

NEW YORK—Prices of soapmaking fats, oils and greases dropped fractionally lower this period, bringing many items on the list down to the record lows set early last summer. The Senate proposal of a five cent per pound impost on foreign oils had no strengthening effect on prices, it being generally believed that no definite action on this proposal can be expected before the next session at the earliest. The only effect of the tax proposal was to discourage trading in futures. Tallow, grease and palm oil declined fractionally again, putting them in an even more favorable position for use by the soap trade. Late in the period price on cottonseed and coconut oils firmed up somewhat in sympathy with higher quotations on lard. The advance in lard was due to reports that hog arrivals have been exceptionally light due to unfavorable weather.

Coconut Oil

Prices were unchanged at the close of the recent period, the market being conspicuous for lack of activity. Little interest in coconut oil is being shown by soap makers due to the more attractive prices quoted on palm oil and tallow.

Cottonseed Oil

In spite of a downward tendency in stock and commodity markets this period, crude cottonseed oil was quoted higher due to firmness in lard prices. Offerings were light and traders showed no tendency to expand commitments.

Greases

Lower prices were again quoted on greases this period, with buyers showing a little more interest at the lower levels reached.

Lard

Government reports late this period indicated that the movement of hogs was lighter than usual due to unfavorable weather. The result was a minor advance in lard prices, lending strength to a number of competing products.

Palm Oil

Palm oil at present levels is very attractively priced for the soap kettle. A fair amount of business continues to be done in this oil, although buyers show no tendency to anticipate in view of the general weakness in other oils.

Tallow

Tallow quotations moved lower again this period, city extra going as low as two cents a pound at one point. At this figure buyers showed renewed interest and an eighth of a cent a pound higher was quoted before the period end.

—o—

Batzouroff & Co., Sofia, Bulgaria, have recently issued a booklet giving authoritative information on the 1932 crop of otto of rose. Unfavorable climatic conditions during the distillation period this year reduced total production to 1,840 kilos. Copies of the booklet may be obtained through George Lueders & Co., New York, agents in United States and Canada for Batzouroff & Co.

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At a meeting of representatives of the soap, perfume, cosmetic and flavoring extract manufacturers of Detroit, held February 9th, plans were adopted for a permanent organization of the group. At a previous meeting at the Masonic Temple in January tentative plans were drawn up. Maison G. de Navarre was chosen to be temporary chairman and R. M. Stevenson, 2457 Woodward Ave., Detroit, secretary pro tem.

—o—

Clover Farm Stores have just announced that their units throughout the country are adding drug departments which will offer a general line of toilet preparations. One of the items carried is "Clover Farm" tooth paste, a non-foaming, orange-flavored dentifrice.

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Study Slogan Identification

A recent study of consumer identification of nationally advertised slogans undertaken for *Printers' Ink Monthly* by R. A. Zinn seems to indicate that manufacturers of nationally advertised soap brands have been unusually successful in identifying their products with slogans. The list of slogans and their owners, together with the results of ninety attempts at identification by radio listeners, follows:

"Keep That Schoolgirl Complexion" (Colgate-Palmolive-Peet Co.)—Correct answers, 87; incorrect, 3.

"99/44-100 Per Cent Pure" (Procter & Gamble Co.)—Correct answers, 87; incorrect, 3.

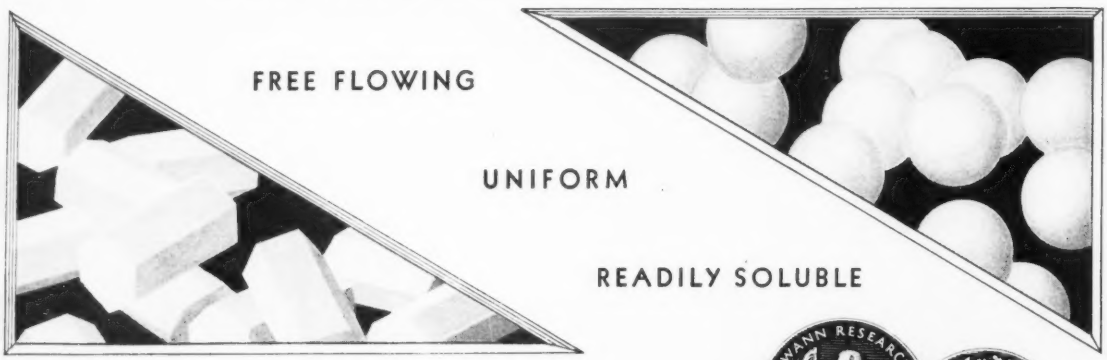
"Skin You Love to Touch" (John H. Woodbury, Inc.)—Correct answers, 62; answers omitted, 6; incorrect answers, 22.

"Hasn't Scratched Yet" (Bon Ami Co.)—Correct answers, 89; incorrect, 1.

It is interesting to note that for the slogan, "Because you Love Nice Things," owned by Van Raalte Co., 37 of the radio listeners picked Lever Bros. Co. as the owner, while two chose Procter & Gamble Co. Pepsodent Co. received one vote for the Wm. Wrigley, Jr., Co. slogan, "—— After Every Meal." Such is fame.

SWANN T.S.P.

CRYSTALLINE OR GLOBULAR



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for Soaps *and* Cleaners

Caustic Soda

"STAUFFER BRAND" Caustic Soda can be supplied either solid or liquid, in drums or tank cars. It is uniform, pure and worth while using in your soap products. Send your next Caustic Soda inquiry to us.

Carbon Tetrachloride

"STAUFFER BRAND" Carbon Tetrachloride will make a good cleaner better. It is 99.9% pure, the purest obtainable anywhere, is water white and is absolutely free from residue or residual odor. May we work with you when you are next in the market? Let us submit samples and prices. Anything from a drum up.

May we estimate on your requirements?

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Office
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Say you saw it in SOAP!

CURRENT PRICE QUOTATIONS

As of February 8, 1933

Minimum Prices are for car lots and large quantities. Price range represents variation in quotations from different suppliers and for varying quantities.

Chemicals

Acetone, C. P., drums.....lb.	.10	.11
Acid, Boric, bbls., 99½%.....ton	95.00	100.00
Cresylic, 97% dk., drums.....gal.	.37	.40
97-99%, pale, drums.....gal.	.42	.45
Formic, 90%, tech.....lb.	.10½	.12
Oxalic, bbls.....lb.	.11	.11¼
Adeps Lanae, hydrous, bbls.....lb.	.14	.15
Anhydrous, bbls.....lb.	.15	.16
Alcohol, Ethyl, U. S. P., bbls.....gal.	2.45	2.59
Complete Denat., No. 5, drums., ex. gal.	.38½	.46¼
Alum. potash lump.....lb.	.03	.03¼
Ammonia Water, 26°, drums, wks...lb.	.02½	.02¾
Ammonium Carbonate, tech., bbls...lb.	.08	.12½
Bleaching Powder, drums.....100 lb.	1.75	2.35
Borax, pd., cryst., bbls., kegs....ton	50.00	55.00
Carbon Tetrachloride, car lots.....lb.	—	.06¼
L. C. L.....lb.	.06½	.07
Caustic, see Soda Caustic, Potash Caustic		
China Clay, filler.....ton	10.00	25.00
Cresol, U. S. P., drums.....lb.	.09	.10
Creosote Oil tanks.....gal.	.11½	.12½
Formaldehyde, bbls.....lb.	.06	.07
Fullers Earth.....ton	15.00	24.00
Glycerine, C. P., drums.....lb.	.10¼	.10½
Dynamite, drums .....lb.	.07½	.08½
Saponification, tanks .....lb.	.05	.05½
Soaps, Lye, tanks.....lb.	.04	.04½
Hexalin, drums .....lb.	—	.30
Kieselguhr, bags .....ton	—	35.00
Lanolin, see Adeps Lanae.		
Lime, live, bbls.....per bbl.	1.70	2.20
Mercury Bichloride, kegs.....lb.	.93	1.08
Naphthalene, ref. flakes, bbls.....lb.	.04¾	.06
Nitrobenzene (Myrbane) drums....lb.	.09½	.11
Paradichlorbenzene, bbls., kegs....lb.	.15	.23
Paraformaldehyde, kegs .....lb.	.38	.39
Petrolatum, bbls. (as to color).....lb.	.01⅞	.06¾
Phenol, (Carbolic Acid), drums....lb.	.14¼	.16
Pine Oil, bbls.....gal.	.61	.66
Potash, Caustic, drums.....lb.	.06⅛	.06⅜
Flake .....lb.	.07	.08
Potassium Bichromate, casks.....lb.	.08	.08½
Pumice Stone, powd.....100 lb.	2.50	4.00
Rosins (600 lb. bbls. gross for net)—		
Grade B to H, basis 280 lbs.....bbl.	2.80	4.05
Grade K to N.....bbl.	4.30	5.15
Grade WG and WW.....bbl.	5.55	5.75
Wood .....bbl.	3.43	3.63
Rotten Stone, pwd. bbls.....lb.	.02½	.04½
Silica, Ref., floated.....ton	18.00	22.00
Soap, Mottled .....lb.	.03½	.04
Olive Castile, bars .....lb.	.09	.12
powder .....lb.	.17	.22
Olive Oil Foot .....lb.	.04½	.06
Powdered White, U. S. P.....lb.	.10	.12
Green, U. S. P.....lb.	.06	.08
Tallow Chips .....lb.	.05	.06
Whale Oil, bbls.....lb.	.04	.04½
Soda Ash, contract, wks., bags, bbls. 100 lb.	1.17½	1.43
Car lots, in bulk	—	1.05
Soda Caustic, Cont., wks., sld...100 lb.	—	2.55
Flake .....lb.	—	2.95
Liquid, tanks .....lb.	2.15	2.20
Soda Sal., bbls.....100 lb.	1.05	1.15
Sodium Chloride (Salt).....ton	11.40	14.00
Sodium Fluoride, bbls.....lb.	.07½	.08½
Sodium Hydrosulphite, bbls.....lb.	.22	.26
Sodium Silicate, 40 deg., drum, 100 lb.	.75	.80
Drums, 60 deg. wks.....100 lb.	—	1.65
In tanks, 15c. less per hundred, wks.		
Tar Acid Oils, 15-25%.....gal.	.21	.25
Trisodium Phosphate, bags, bbls.....lb.	.03	.0390
Zinc Oxide, lead free.....lb.	.06	.06¼
Zinc Stearate, bbls.....lb.	.16	.18

Oils—Fats—Greases

Castor, No. 1, bbls.....lb.	.09	.10
No. 3, bbls.....lb.	.08¾	.09½
Coconut		
Ceylon, Coast Tanks .....lb.	.02⅞	.03
Cochin, barrels, N. Y. .....lb.	.04½	.04¾
Manila, tanks, N. Y. .....lb.	.03⅛	.03¼
Tanks, Pacific Coast.....lb.	.02⅞	.03
Cod, Newfoundland, bbls.....gal.	.19	.22
Copra, bulk, Coast .....lb.	—	.0170
Corn, tanks, mills.....lb.	.03	.03⅛
Bbls., N. Y.....lb.	.05¼	.05½
Cottonseed, crude, tanks, mill.....lb.	.02¾	.02⅞
PSY .....lb.	—	.03½
Degras, Amer., bbls.....lb.	.02½	.03¾
English, bbls .....lb.	.03⅝	.03⅞
German, bbls .....lb.	.02⅞	.03½
Neutral, bbls. .....lb.	.06½	.08½
Greases, choice white, bbls., N. Y...lb.	.02¼	.03¼
Yellow .....lb.	.02	.02⅛
House .....lb.	.02	.02⅛
Lard, prime, steam, tierces.....lb.	.04	.04¼
Compound tierces .....lb.	.06	.06¼
Lard Oil,		
Extra, bbls. .....lb.	—	.06½
Extra, No. 1, bbls. .....lb.	—	.06
No. 2, bbls. .....lb.	—	.05¾
Linseed, raw, bbls., spot.....lb.	.0720	.0760
Tanks, raw .....lb.	—	.0660
Boiled, 5 bbls. lots.....lb.	—	.0840
Menhaden, Crude, tanks, Balt. ...gal.	.09	Nom.
Oleo Oil, No. 1, bbls., N. Y. .....lb.	—	.06
No. 2, bbls., N. Y. .....lb.	—	.05½
Olive, denatured, bbls., N. Y.....gal.	.56	.58
Foots, bbls., N. Y. .....lb.	.04½	.04⅝
Palm .....lb.	.02⅜	.02¾
Palm Kernel, casks, denatured ....lb.	.04¼	Nom.
Peanut, domestic tanks .....lb.	.03¼	.03⅜
Red Oil, distilled, bbls. .....lb.	.06	.06⅝
Saponified, bbls. .....lb.	.06	.06⅝
Tanks .....lb.	—	.05
Soya Bean, domestic tanks, N. Y...lb.	—	.03¾
Stearic Acid		
Double pressed .....lb.	.08	.08½
Triple pressed, bgs. .....lb.	.10¾	.11¼
Stearine, oleo, bbls. .....lb.	.03¾	.04
Tallow, special, f. o. b. plant .....lb.	—	.02
City, ex. loose, f. o. b. plant .....lb.	—	.02⅛
Tallow, oils, acidless, tanks, N. Y. ..lb.	—	.05
Bbls., c/1, N. Y. .....lb.	—	.05½
Whale, nat. winter, bbls., N. Y. ..gal.	.51	.53
Blchd., winter, bbls., N. Y. ....gal.	.54	.55
Extra blchd., bbls., N. Y. .....gal.	.57	.58

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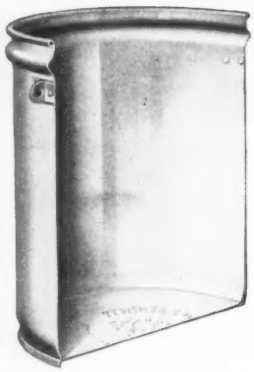
Bitter, F. F. P. A.	lb	2.50	2.75
Sweet, cans	lb	.38	.40
Apricot, Kernel, cans	lb.	.22	.24
Anise, cans	lb.	—	—
U. S. P., cans	lb.	.32	.33
Bay, tins		1.50	1.70
Bergamot, coppers	lb	1.35	2.00
Artificial	lb.	1.35	1.50
Birch Tar, rect., bot.	lb.	.45	.50
Crude, tins	lb.	.13	.14
Bois de Rose, Brazilian	lb	.92	1.00
Cayenne	lb	2.00	2.10
Cade, cans	lb.	.26	.27
Cajuput, native, tins	lb.	.52	.54
Calamus, bot.	lb.	2.75	3.00
Camphor, Sassy, drums	lb	.11	.12
White, drums	e.lb.	.11	.12
Cananga, native, tins	lb.	1.70	1.80
Rectified, tins	lb.	2.20	2.30
Caraway Seed	lb.	1.45	1.55
Cassia, Redistilled, U. S. P.	lb.	.82	.85
drums	lb.	—	.80
Cedar Leaf, tins	lb.	.55	.60
Cedar Wood, light, drums	lb.	.26	.28
Citronella, Java, drums	lb.	.49	.50
Citronella, Ceylon, drums	lb.	.33	.34
Cloves, U. S. P., cans	lb.	.75	.90
Eucalyptus, Austl., U. S. P., cans	lb.	.24	.26
Fennel, U. S. P., tins	lb.	1.00	1.10
Geranium, African, cans	lb.	4.20	5.00
Bourbon, tins	lb.	4.00	4.50
Hemlock, tins	lb.	.70	.75
Lavender, U. S. P., tins	lb.	1.85	3.50
Spike, Spanish, cans	lb.	.55	.75
Lemon, Ital., U. S. P.		.75	1.00
Lemongrass, native, cans	lb.	.42	.44
Linaloe, Mex., cases	lb.	1.25	1.35
Neroli, Artificial	lb.	10.00	20.00
Nutmeg, U. S. P., tins	lb.	.90	.95
Orange, Sweet, W. Ind., tins	lb.	1.10	1.15
Italian cop.	lb	1.10	1.50
Distilled	lb.	.48	.50
Origanum, cans, tech.	lb.	.25	.40
Patchouli	lb	3.25	4.50
Pennyroyal, dom.	lb.	1.70	1.80
Imported	lb.	1.10	1.25
Peppermint, nat. cases	lb	1.70	1.80
Redis., U. S. P., cases	lb	1.90	2.05
Petit Grain, S. A., tins	lb	.90	.95
Pine Needle, Siberian	lb.	.60	.63
Rose, Natural	oz.	6.00	15.00
Artificial	oz.	2.00	2.75
Rosemary, U. S. P., tins	lb.	.27	.30
Tech., lb. tins	lb.	.23	.27
Sandalwood, E. Ind., U. S. P.	lb.	5.75	6.25
Sassafras, U. S. P.	lb	.70	.80
Artificial	lb.	.16	.18
Spearmint, U. S. P.	lb.	.95	1.00
Thyme, red, U. S. P.	lb.	.50	.65
White, U. S. P.	lb.	.60	.70
Vetivert, Bourbon	lb.	4.50	5.00
Java	lb.	16.00	20.00
Ylang Ylang, Bourbon	lb.	4.00	6.00

Aromatic Chemicals

Acetophenone, C. P.	lb.	$1.75	$2.25
Amyl Cinnamic Aldehyde	lb.	3.50	4.25
Anethol	lb.	.90	1.00
Benzaldehyde, tech.	lb.	.60	.65
U. S. P.	lb.	1.20	1.35
Benzyl, Acetate	lb	.60	.95
Alcohol	lb.	.80	1.30
Citral	lb.	2.10	2.40
Citronellal	lb.	1.75	2.50
Citronellol	lb.	2.50	3.50
Citronellyl Acetate	lb.	4.50	7.00
Coumarin	lb.	3.60	4.00
Cymene, drums	gal.	.90	1.25
Diphenyl oxide	lb.	1.10	1.20
Eucalyptol, U. S. P.	lb.	.60	.70
Eugenol, U. S. P.	lb.	2.25	3.00
Geraniol, Domestic	lb.	1.45	2.00
Imported	lb.	2.00	3.25
Geranyl Acetate	lb.	2.50	4.00
Heliotropin, dom.	lb.	2.00	2.50
Imported	lb.	2.50	4.00
Hydroxycitronellal	lb.	3.50	9.00
Indol, C. P.	oz.	2.50	5.00
Ionone	lb.	3.75	6.50
Iso-Eugenol	lb.	3.50	5.00
Linalool	lb.	1.95	3.25
Linalyl Acetate	lb.	2.40	3.15
Menthol	lb.	3.35	3.50
Methyl Acetophenone	lb.	2.50	3.00
Anthranilate	lb.	2.20	2.60
Paracresol	lb.	4.50	6.00
Salicylate, U. S. P.	lb.	.40	.45
Musk Ambrette	lb.	6.75	7.25
Ketone	lb.	6.00	7.50
Moskene	lb.	5.40	5.90
Xylene	lb.	2.75	3.00
Phenylacetaldehyde	lb.	4.75	7.25
Phenylacetic Acid, 1 lb., bot.	lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.	lb.	4.25	4.50
Rhodinol	lb.	6.00	9.50
Safrol	lb.	.20	.22
Terpineol, C. P., 1,000 lb. drs.	lb.	.28	.30
Cans	lb.	.33	.34
Terpinyl Acetate, 25 lb. cans	lb.	.80	.95
Thymol, U. S. P.	lb.	1.50	1.75
Vanillin, U. S. P.	lb.	4.50	5.75
Yara Yara	lb.	1.60	3.00
Insect powder, bbls.	lb.	.17	.21
Concentrated Extract			
5 to 1	gal.	1.30	1.60
15 to 1	gal.	3.35	3.75
20 to 1	gal.	5.20	5.40
30 to 1	gal.	7.25	7.50
Gums—			
Arabic, Amb. Sts.	lb.	.06	.06½
White, powdered	lb	.09	.12
Karaya, powdered No. 1	lb.	.09	.12
Tragacanth, Aleppo, No. 1	lb.	.70	.75
Sorts	lb.	.07	.08
Waxes—			
Bayberry, bgs.	lb.	.14	.15
Bees, white	lb.	.30	.33
African, bgs.	lb.	.13	.14
Refined, yel.	lb.	.20	.30
Candelilla, bgs.	lb.	.10	.11
Carnauba, No. 1	lb.	.22	.23
No. 2, Yel.	lb.	.21	.22
No. 3, Chalky	lb.	.12	.13
Japan, cases	lb.	.05¾	.06
Paraffin, ref. 125-130	lb.	.03⅜	.04⅛



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Say you saw it in SOAP!

The Case of Coconut Oil

(*From Page 29*)

tually coconut oil for the year, 1931, averaged appproximately ¾c a pound higher than the price of packers prime tallow, the most expensive of any of the animal fats used in the manufacture of soap. The prices compared are for the two commodities laid down at the principal points of consumption; the proper freight rates being taken into account in arriving at the price for each.

The statistics as they relate to palm oil are particularly interesting and are included in this comparison, not that they have any bearing on coconut oil but purely because of the fact that they emphasize the erroneous contentions that these imported tropical vegetable oils must be sold at prices below our domestic product to insure their being used. Although the quantity of soap produced in 1931 was somewhat below that produced in 1929, the actual consumption of palm oil in soap manufacture in 1931 was substantially above that for 1929, and the ratio of palm oil consumed to the total hard soap produced for 1931 was 1% above that for 1929. Throughout 1931 and for the first seven months of 1932 palm oil sold at prices substantially above prime tallow, averaging between ¼ and ⅜c per pound above the price of tallow.

Just a word of explanation should be given in regard to the method used in arriving at this ratio. The coconut oil consumption ratio is determined by using the total production of hard soap and liquid soap, in view of the fact that coconut oil is an essential ingredient in both types of soap. The palm oil consumption ratio is determined by using the statistics for the hard soap manufacture, as palm oil has no place in the manufacture of liquid soap, relatively speaking. Incidentally, the consumption of coconut oil must have fallen off proportionately with the decline in the production of soft and liquid soaps in 1931 as compared with 1929, and its consumption increased accordingly in the manufacture of hard soaps, bars, chips, flakes, beads, powders, etc. It is impossible to understand how, in the face of these economic facts, anyone can contend that the soap manufacturers use these fats and oils purely on a basis of price consideration, for during a year when the price of the two most important imported vegetable oils has remained substantially above the price of the most important domestic soapmaking fat, inedible tallow, their uses have actually increased.

Those individuals intrusted with the responsibility of passing upon this most complicated economic problem should be shown, in a way that they will understand and appreciate, that there are fundamental scientific differences between these oils; that they are not interchangeable; that they are as different from each other as rubber is from leather, as revealed through the difference in their chemical compositions; and that they are indispensable commodities absolutely essential to the maintenance of our present high standards of health and sanitation.

SO THE choice in cleansers is METSO, Sodium Metasilicate. Today the cleaner is judged just as wisely as fuel. Alkali pressure (pH) is an important measurement in evaluating a cleanser. METSO sodium metasilicate provides more alkali at pH 10 than any other alkali except caustic, and further, its pressure is maintained until alkalinity is almost completely neutralized. (For most cleaning operations, the pH of the cleaning solution must be 10 or above to be effective.)

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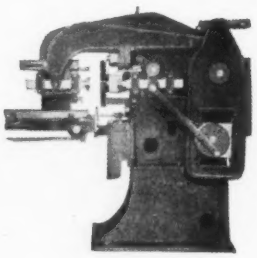

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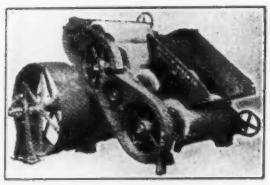

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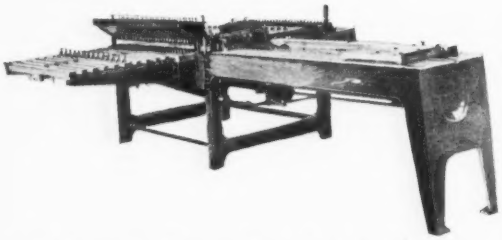
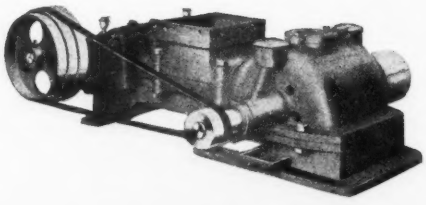
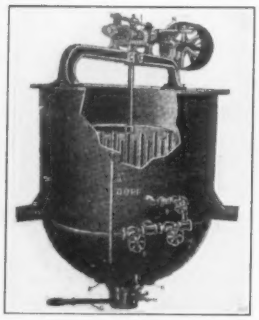


2—Automatic Power Soap Cutting Tables.



3—10A Soap Powder Mills.



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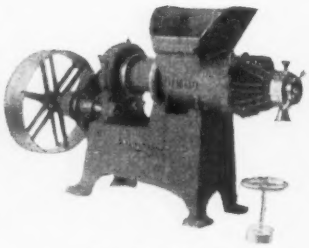

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Oil-Fat-Soap
PRODUCTION SECTION
A section of SOAP devoted to the technology of oils, fats, and soaps. published prior to Jan. 1, 1932, as a separate magazine under the title, *Oil & Fat Industries*.

The Sulfonated Fatty Alcohols

BY DR. SAMUEL LENHER*
E. I. DuPont de Nemours & Co.

THE search for new textile assistants has led to the discovery of a new series of chemical compounds, the sulfonated fatty alcohols. The sulfonated fatty alcohols are half sulfuric acid esters of fatty alcohols; in these compounds we can consider that one of the replaceable hydrogens in sulfuric acid has been neutralized by a primary fatty alcohol radical and the other replaceable hydrogen has been replaced by an atom of sodium. The fatty alcohols from which these sulfonated products are derived are prepared from the catalytic reduction of naturally occurring fats and fatty acids by hydrogen. The synthesis of these fatty alcohols was carried out independently by the Deutsche Hydrierwerke in Germany and by the DuPont Company in this country. The sulfonated alcohols comprise a series of derivatives of the alcohols from ethyl alcohol up to the highest known members of the series having more than thirty carbon atoms in the aliphatic chain. Most of these sulfuric acid esters are new compounds and their properties and uses are being examined for the first time. It has been found that the sulfonated alcohols having from twelve to eighteen carbon atoms in the molecule have soap-like characteristics which are analogous to the detergent characteristics of the common soaps. These soap-like sulfonated fatty alcohols are being marketed under the trade names of Gardinol and Brilliant Avirol products.

Soap is an excellent general detergent when used alone in soft water or when used with the assistance of a mild alkali. Under any other conditions, such as with acids, strong alkalis, or in the presence of metal ions, the detergent action of soap is reduced or even destroyed entirely. The sulfonated fatty alcohols have been developed especially to meet these conditions. These products exert their detergent properties under conditions of strong acidity or alkalinity, and in the presence of hard water, sea water, or of heavy metal salts. These properties have been described in some detail in papers in this country and abroad and are now becoming as familiar to experts as are the properties of soaps.

European experience with the sulfonated fatty alcohols has shown them to be valuable new textile assistants. In this country the sulfonated alcohols are being introduced as general soap substitutes to replace soap where an improvement of any kind over the action of soap can be made. Since the sulfonated alcohols are considered as soap substitutes it is interesting to compare and contrast some of the characteristics of solutions of soaps and of sulfonated alcohols.

Soaps are materials which form solutions in water which have soapy properties. Some of the more obvious soapy properties are a certain slippery feel of soap solutions and a pronounced tendency of the solutions to froth and build up foams. All soaps have the characteristic soapy feel and this soap-like feel is also shown by the sulfonated alcohols. The sulfonated alcohols show the soapy feel less than common soaps because of their lower viscosity and higher solubility. All soaps build up foams on agitation and the sulfonated alcohols also show a strong tendency to form stable foams. However, all solution which foam do not show soap-like detergent action; for example many dyestuffs, saponin, and penetrating assistants such as the alkylated naphthalene sulfonic acids, foam as much as most soaps but show no soap-like detergent action. Common soaps form alkaline solutions in water. This fact had led to

*Address before American Assn. Textile Chemists and Colorists. (Reprinted *American Dyestuff Reporter*, Jan., 1933, Off. Jour.)

the idea that soaps are dissociated in solution into fatty acid and free alkali and that these materials act more or less separately to exert the observed detergent effect of soap. It is now known that the amount of free alkali in soap solutions is far too small to account for their detergent action. The sulfonated alcohols cannot yield free alkali in solution, and it is clear that some explanation other than the presence of free alkali must be made for the powerful soap-like action of the sulfonated alcohols. Both soaps and fatty alcohols sulfonates act to greatly reduce the surface tension of water and to concentrate at interfaces and to tend to emulsify or carry into colloidal solution, particles with which the solution is in contact.

Commercial soaps, or the alkali metal salts of fatty acids, having from twelve to eighteen carbon atoms in the molecule, form colloidal solutions in water which show great surface activity and pronounced detergent action. These properties have their origin in the nature of the soap particles in water solution. It has been shown, largely by the work of McBain, that soap solutions are by no means homogeneous and that they contain soap particles of widely varying composition. Part of the soap is in solution in the form of colloidal particles, or micelles, and it has been shown that surface activity and detergent action are associated with the presence of these micelles in solution. The remainder of the soap is in solution as molecularly dispersed soap and as fatty acid anion and alkali cation. Only a small part of the dissolved soap is actually hydrolyzed into fatty acid and free alkali, and this hydrolysis takes place only in very dilute solution. McBain has shown by conductivity measurements and osmotic pressure measurements that soap solutions behave like solutions of ordinary electrolytes except that in soap solutions the colloidal aggregates, or miscelles, conduct current as well as the alkali ions and fatty acid ions. The micelles consist of soap molecules and water with varying amounts of absorbed fatty acid and alkali ions. Thus in considering the behavior of soap solutions the equilibrium between the soap present in the form of micelles, or in colloidal solution, and the soap present in molecular and ionic form, or in true solution, must be taken into account. This equilibrium between colloid and crystalloid soap in solution is perhaps the most significant property of soap solutions from the standpoint of their detergent action.

It is important in considering the properties of soaps and sulfonated alcohols in solution as detergents to note that whether a certain soap or sulfonated alcohol behaves as a detergent or not depends on the temperature. The soft soaps, or lower fatty acid soaps containing twelve to fourteen carbon atoms in the molecule and the corresponding sulfonated alcohols, which comprise Gardinal WA, show their greatest surface activity and detergent action at relatively low temperatures of below 40° C. The hard soaps, or higher fatty acid soaps containing sixteen to eighteen carbon atoms in the molecule, and the corresponding sulfonated alcohols which comprise Gardinol CA and the Brilliant Avirol products show their greatest surface activity at higher temperatures from 50° to 100° C. This behavior is easily interpreted in terms of the equilibrium between colloid and crystalloid particles in solution. The detergents with short carbon chains give many micelles at low temperatures while at higher temperatures the solubility is so high that the micelles are broken down to crystalloid size and the surface activity is destroyed. The detergents with long carbon chains have such a low solubility at ordinary temperatures that only few micelles are formed while at high temperatures the increased solubility permits the formation of large numbers of micelles. Thus for example, solutions of the sulfonated alcohols in Gardinol WA show great surface activity and detergent action at ordinary temperatures and are found to contain colloidal particles, while at temperatures near the boiling point of water the surface activity has disappeared and the detergent action has become less.

Measurements of the conductivity of solutions of the pure sulfonated fatty alcohols in Gardinol WA show these solutions to behave like soap solutions. Solutions of these alcohol sulfonates show a low equivalent conductance which increases gradually and continuously with dilution until a sharp increase in conductance is

Fig. 1—Gardinol WA Double Powder. 20% solution, freshly prepared, 510 diameters magnification.

Fig. 2—Gardinol CA Powder, 1% solution, freshly prepared, 510 diameters magnification.

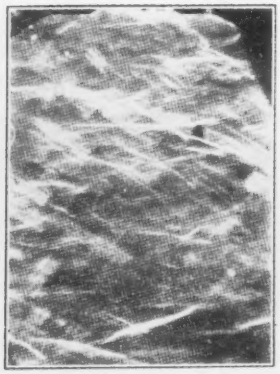

Fig. 3—Gardinol CA Powder, 1% solution, aged one week, 510 diameters magnification.

Fig. 4—Sodium Oleate, 15% solution, freshly prepared, 510 diameters magnification.

observed at 0.00025N. At this concentration the conductance of the solution becomes quite high and is approximately that of strong electrolytes, as potassium chloride or sodium sulfate. Since at approximately the same concentration the surface activity of the solutions is very slight it is supposed that this increase in conductance marks a dissociation or dissolution of the micelles into crystalloid form and that this change of the micelles into simple molecules and ions causes the loss of surface activity.

The most direct evidence for the existence of micelles in solutions of sulfonated alcohols is given by an ultramicroscopic examination. Solutions of sulfonated alcohols in water were examined with a Leitz cardiod ultramicroscope using both a Siedentopf dark field condenser and a Jentzsch condenser. Solutions were examined at magnifications up to 1450 diameters. Solutions of Gardinol WA showed many small spherical particles which exhibited a very active Brownian movement. Figure 1 shows an ultra-microphotograph of a solution of Gardinol WA at a magnification of 510 diameters. The Brownian movement was much more pronounced than with oleate or stearate soap solutions. Solutions of Gardinol WA showed little or no tendency to agglomerate on standing. The few large particles in the field appeared to be very loose aggregates of several small particles in a network. The field was very dark and showed no evidence of the existence of particles just below visibility. Strong sulfuric acid solutions and strong caustic soda solutions of Gardinol WA appeared the same as solutions in distilled water. Addition of calcium chloride cause an agglomeration of the particles to nebulous clusters made up of long rod-like particles which showed a less intense Brownian movement.

Solutions of Gardinol CA, or oleyl sodium sulfonate, gave a bright field with a great number of long needle-like crystals. Figure 2 shows a fresh solution of Gardinol CA photographed at a magnification of 510 diameters. Figure 3 shows a solution of Gardinol CA after ageing a week. The particles were larger than the Gardinol WA particles but still showed a very active vibratory Brownian movement. Solutions with caustic soda appeared the same as those in water, but solutions in sulfuric acid showed some agglomeration to larger rod-like particles. Solutions of Gardinol CA showed a tendency to agglomerate to larger rod-like and spherical particles on standing.

Solutions of the Brilliant Avirol L 142, or mixture of cetyl and stearyl sodium sulfonates, appeared very like solutions of Gardinol CA except that they showed less Brownian movement.

The addition of amounts of sodium sulfate many times that of the sulfonated alcohol had no effect on the particle size.

Solutions of sodium stearate gave bright fields with many large clusters of particles. The clusters had in general a chain-like structure and showed the beading which was noted by McBain. There were relatively few small particles. Solutions of sodium oleate gave light fields showing numerous clusters of chains. Figure 4 shows an ultramicrophotograph of a solution of pure sodium oleate taken at a magnification of 510 diameters. Many of the particles were crescent shaped. The solutions showed a Brownian movement which was less than that observed with Gardinol solutions.

These ultramicroscopic observations show conclusively the presence of micelles in solutions of sulfonated alcohols. The small size of the micelles in the Gardinol solutions indicates that the solutions are of the sol type. The active Brownian movement of the micelles of sulfonated alcohol shows the viscosity of the solutions to be much less than that of soap solutions since the activity of the observed Brownian movement depends directly on the viscosity of the solution.

Measurements of the relative viscosity of water and of dilute solutions of sodium soaps and of sulfonated alcohols show that the viscosity of the sulfonated alcohol solutions is considerably less than that of soap solutions. This indicates further that the sulfonated alcohols form solutions of the sol type and that the micelles are probably quite small and contain so little bound water that they do not greatly increase the viscosity of the water solution.

It appears from these observations that solutions of sulfonated fatty alcohols show a general similarity to soap solutions in their physical properties. It is probable that McBain's suggestion that the detergency of soap solutions is associated with the presence of micelles in solution, is directly applicable to solutions of sulfonated alcohols. We do not as yet know what the structure of the sulfonated alcohol micelles is, but it can be suggested from the known chemical behavior of these compounds that the micelles consist of molecules of sulfonated alcohol and adsorbed sodium ions with relatively little bound water. Since the sulfonated alcohols in solution show the fundamental properties of common soaps there is a sound basis for advancing these compounds as soap substitutes. The resistance of the sulfonated alcohols to acids, alkalis and heavy metals is so complete that these products open up possibilities for the application of detergents in processes where soap-like detergents could not even be considered for use previously. Clearly the physical and chemical characteristics of solutions of sulfonated alcohols show that they can be used as assistants and detergents on both animal and vegetable fibers over a wide range of conditions.

It is interesting that the sulfonated alcohols which are marketed as the Gardinol products have so far found their greatest use in processing wool. Raw wool which has been processed with Gardinol is very soft and has a lofty open appearance. Wool which has been properly processed with soap may be equally as clean and free from grease as that processed with Gardinol, but it does not have the soft feel or open-appearance of the Gardinol

(*Turn to Page* 64)

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Milled Soaps from Half-Boiled Base

VERY little is found in the trade and technical literature on the manufacture of half-boiled milled toilet soaps with the exception of shaving soaps. Successful production of these soaps involves careful control of the purity of the stock and chemicals, of the selection of fats and oils used, of the percentage composition of the stock, of the saponification proper, and of the milling of the finished soap. An anonymous article, recently published in *Seifensieder Zeitung*, 1932, pages 457 to 459, affords valuable information on this subject, apparently based on many years of experience in making these soaps.

According to the author, the purity of the stock and of the alkali used in saponification requires the most careful attention of all. Particularly caustic soda must be carefully tested for chlorides. These are usually found in commercial caustic soda between 1.5 and four per cent. They cannot be present in excess of four per cent; otherwise, the salt content of the soap will be abnormally high and difficulties will be encountered in milling. Certain technical grades of caustic soda have been found to contain as high as thirteen per cent chlorides, proving the necessity of testing all shipments. A soap made with this caustic soda analyzed 0.8 to one per cent sodium chloride. Aside from the usual harmful effect on the soap, causing cracking of the cakes, poor lathering, sweating, etc., the salt also makes the milled soap scaly.

As far as the stock is concerned, beef tallow is well suited, as it is white in color and can be readily bleached whiter if required. The titer of the tallow is best a maximum of 43 degrees. Coconut oil may be used in the natural color, unless a very white soap is required. Peanut oil may not be used to more than a maximum of five per cent on the total weight of the stock. Castor oil may be added in three to five per cent of the weight of the stock; light-colored, air-bleached or chemically-bleached palm oil may also be used. Only very light-colored rosin should be used in proportion of a half per cent on the weight of the stock, when the soap is milled as made. Too much rosin makes the soap too tough and difficult to mill. As much as one per cent rosin may be added to the half-boiled soap, provided that it is first mixed with 50 per cent of full-boiled soap before milling.

In making up the stock mixture, the price of the ingredients plays an important role. The whiteness of the finished soap is also important, for when the soap need not be pure white, second quality tallow, castor oil and the like can be used. Examples of stocks are 70 parts tallow, 20 parts palm oil, 5 parts coconut oil, 4.5 parts peanut oil and 0.5 parts rosin; also 65 parts tallow, 20 parts coconut oil, 14.5 parts palm oil and 0.5 part rosin; also 60 parts tallow, 20 parts palm oil, 10 parts coconut oil, 4.5 parts castor oil, 0.5 part rosin and 5 parts peanut oil. The tallow may be reduced as low as 55 parts, but less tallow in the stock gives a soap which consumes too rapidly. As much as 30 per cent coconut oil may be used in special cases without any trouble in milling or in the use of the soap. The possibility of such soaps irritating sensitive skins must however be borne in mind. Ten to fifteen per cent coconut oil is really sufficient for all purposes, and when mixed with palm oil and low titer tallow, a well-lathering soap, economical in use, is obtained.

The important question is whether it is possible to manufacture stable soaps, which do not become rancid, by this process. A large number of factors are involved in the rancidity phenomenon and the experience of the author in making this soap in batches as small as 200 pounds and as large as 12,000 have not revealed to him all the conditions of the saponification process which may affect the keeping quality of the soap. Many factors are involved in rancidity and it is not always possible to exclude them all. The curd soap, before being milled, must not be dried too hard, since soap that is a little moist mills better than normal soap. Inasmuch as the soap is almost entirely free from salt and contains all the glycerin of the fats, it is very pliable and hence it mills easily and well.

Various half-boiled milled soaps, perfumed in varied ways, were examined for rancidity. Neither spotty discoloration nor decomposition resulting in bad odor was observed. This soap is entirely different from a curd soap, and much greater care must be taken in selecting pure fats and oils for its manufacture. Everything in the stock remains in the soap, which is quite different from a curd soap. Well-keeping soap will be obtained by this method, provided that the stock is pure. The addition of a suitable reducing agent will aid in preventing the soap becoming rancid.

Another observation made on cakes of the half-boiled milled toilet soap was their becoming moist due to the hygroscopicity of the glycerin contained. Direct precipitation of moisture on the cakes was never seen, but in certain cases where the soap was kept in humid air, the surface became dulled. The average consumer of toilet soap will not find this objectionable. A mixture of 50 per cent half-boiled soap with 50 per cent nor-

mally boiled soap gives a product which does not change even in extremely humid atmosphere. These half-boiled soaps wash as well as ordinary curd soap, their lathering quality being usually better. The cakes do not crack. The soap can be superfatted like any curd soap by the addition of lanolin or the like.

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Sulfonation Processes for Wetting Agents

The attention that the chemists and soap technologists are giving the newer detergents, those that are not strictly soaps, is well illustrated by the mass of data contained in a new publication, entitled "New Sulfonation Processes for the Manufacture of Dispersing, Wetting and Scouring Agents." This book is written in German and is published by Allgemeiner Industrie Verlag G.m.b.H., Berlin, Germany. It is merely a review of the patents issued in Germany, France, England and the United States on sulfonation processes and their products. Several hundred patents are reviewed in its fifty pages. There are four sections to the book. The first is concerned with patents on the sulfonation of little-used substances, the second with the sulfonation of mineral oils, the third with the sulfonation of aromatic substances and the fourth with the sulfonation of fatty oils, fatty acids and their derivatives. The last section contains by far the most patents. Each patent is described in brief, non-legal language so that the reader may gain a good idea of its scope. There is also an index.

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Sodium Metasilicate Gels

Sodium metasilicate is used widely as a detergent in washing milk bottles, etc., in dairies. An objection was raised against its use for this purpose due to the fact that the washing solutions may gel. An investigation was accordingly carried out to determine what factors cause gel formations. The following factors were studied: lactic acid, alkaline washing powders, sour milk and sweet skim milk, gel formation in other alkaline washing solutions in the presence of milk, addition of other alkaline washing powder, sour milk and milk solids, effect of agitation and effect of temperature. The experiments were carried out on solutions of metasilicate of varying concentration. The investigation included the study of the formation of gel in sodium hydroxide and trisodium phosphate solutions in the presence of milk.

The following conclusions were reached. Sodium metasilicate solutions do not gel when no other substance is added. The addition of lactic acid causes gel formation in those solutions which are near the neutral point in reaction. The gels become weaker as the acidity or alkalinity of the solution is increased. Gel formation ceases when a certain point in the reaction is reached. The addition of other alkaline washing powders, except that of sodium bicarbonate, does not increase the tendency for gel formation. The addition of sodium bicarbonate causes gel formation. The addition of sour milk and milk solids causes gel formation. The milk solids, as well as acid, lower the pH value of the solutions. Agitation tends to break up the gel and thus prevent formation to some extent. Temperature of about 120 degrees F causes more gel formation than other temperatures. A certain minimum amount of metasilicate is necessary for gel formation. The amount of sour milk and milk solids necessary for gel formation is large. Apparently gel formation in sodium metasilicate washing solutions in the milk bottle washing machines may take place when the solutions contain less than three per cent of the metasilicate, and when about four per cent or more of the milk solids accumulate. Hence the formation of gel in these washing solutions can be avoided by using concentrations of metasilicate greater than three per cent and by discarding the wash liquor when it is found to contain about four per cent of milk solids other than fat. M. J. Prucha and C. A. Getz. *Industrial and Engineering Chemistry*, 1933, volume 25, pages 68 to 72.

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Addition of one to 15 per cent of cresol to a soap containing 0.25 to three per cent of mercuric chloride moderates its harsh action on the skin. P. H. Todd. United States Patent No. 1,835,101, filed December 8, 1931.

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The Sulfonated Fatty Alcohols

(*From Page* 61)

scoured wool. It appears that although Gardinol is very soluble and easily rinsed out of fibers, it imparts a character of its own to wool. It has been found that the potassium salt of the sulfonated alcohols in Gardinol WA is very insoluble and that the solubility is not more than 0.1 gram per liter. Since the suint on the raw wool fiber is composed mainly of potassium salts of fatty acids, it is possible that in the presence of Gardinol a certain small amount of the potassium salt of Gardinol is formed on the fiber in the presence of the suint and left there to impart the characteristic soft Gardinol finish. The advantages shown by Gardinol keeping wool soft after it has once been scoured do not of course depend on the suggestion just made, but may be considered to be due to the fact that the solubility of the Gardinol permits all foreign matter to be rinsed away from the fiber to leave it clean.

The Brilliant Avirol products show in addition to their detergent properties at elevated temperatures fatty and waxy characteristics which soaps do not show. These fatty properties together with the chemical stability of the Avirol products make them suitable for finishing purposes. It has been found that the finish which the Avirol products give to fibers is quite fast to washing and is a semi-permanent finish for artificial fibers.

The family of sulfonated alcohol products shows a wide range of properties which up until recently had been recognized only in the soap series. In addition, the sulfonated alcohols show a chemical stability which opens up entirely new fields for the industrial application of detergents.

ON PRODUCTS AND PROCESSES

A mixture of 36 kilograms of calcium carbonate, 448 kilograms of water and five kilograms of starch is claimed to make ordinary soap white, unctuous and highly beneficial to the skin. This mixture is added to a separately prepared solution of three kilograms of caustic lye and five kilograms of water which is neutralized by the addition of 1.5 kilograms of alum dissolved in five kilograms of hot water. When all the ingredients are well mixed, the material is ready for addition to the soap. Marcel Daniel. French Patent No. 586,958.

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About twenty per cent of fatty acid-ethanolamine (or other similar amine) soaps are incorporated in marine soaps, and the like. The amine soaps of coconut oil fatty acids are particularly suitable. In the second patent is described the addition of ethanolamine soap (or constituent amine and fatty acids) to the soap stock. This greatly increases the speed of saponification. Larkin Co., Inc., United States Patents Nos. 1,833,899 and 1,833,900.

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Ethyleneglycol monoethyl ether is used in the analysis of fats. It may also be used for the preparation of reagents for the analysis of fats in place of ethyl alcohol, ether and ordinary organic solvents. Its application to the determination of the acid value, the saponification number, color reactions and in the microscopical examination of fat crystals is described. E. Jaffe. *Annali Chimica Applicata*, 1932, volume 22, pages 426 to 433.

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Various cleansing, scouring, wetting and emulsifying agents are tested to determine their relative efficiency for textile purposes. The method used consists in allowing a definite volume of the liquid to run slowly from a burette, the end of which is immersed in a liquid which is not miscible with water. The number of drops formed are counted. Newer cleansing agents of the sulfonated, aliphatic alcohol type, which are very stable in the presence of acid of moderate concentration, are proven by this method to be superior to the sulfonated castor oil and naphthylamine types, both in the absence and in the presence of added electrolyte. H. Boxser. *Melliand's Textilberichte*, 1932, pages 380-384.

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Colloidal solutions are obtained in benzine with sodium soaps, except the sodium soap of castor oil, which is insoluble. When the oil concentration of the benzine solution of the soap stock is increased to 69 to 71.5 per cent (the variation depends on the temperature), the neutral oil is completely separated from the soap and coloring matter. A. Slashcheu. *Masloboino Zhir. Delo*, 1932, number 1, pages 46 to 47.

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Hard stable soaps, which contain 60 to 70 per cent of fatty matter, are produced by the saponification of fats or oils with the equivalent quantity of caustic alkali at approximately 125 degrees under two to ten atmospheres pressure for half to three-quarters of an hour. From 43 to 49 per cent of fat may be used in the stock and the excess water may be allowed to evaporate while the soap cools. Then again the full quantity of fat may be charged and the solidification point of the soap mass lowered by the addition of hydrated salts, such as sodium carbonate, sodium sulfate, etc. F. W. Leffer. British Patent No. 379,760.

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A cleansing paste for dissolving and absorbing dirt, fat, and the like, and for cleaning paint, fabrics, etc., is prepared by mixing a solution, which contains rice starch, deodorant, and water, with an emulsion, containing carbon tetrachloride, decahydronaphthalene (decalin), cyclohexanol, olive oil and water. After the two are added together, an aqueous solution of sodium hydroxide is admixed to form a paste as final product. H. Horbert and G. Schwarze. British Patent No. 378,335.

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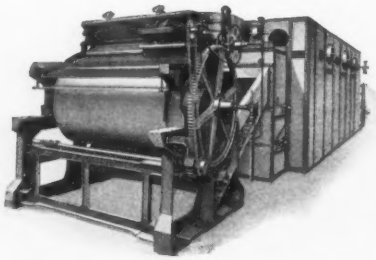
Heating fats with meta-xylidine, para-anisidine or para-phenetidine results in their partial hydrolysis. The low iodine value of the mixture of the acids, obtained by the hydrolysis of the purified product of the reaction, shows that glycerides of saturated acids react more easily than the ordinary fats. The greater the molecular weight of the base or amine used, the greater the amount of fat escaping hydrolysis, and the lower the iodine number of the mixture of the acids, obtained from the saponification of the substituted amides. E. de Conno and L. Tarsitano, *Annali Chim. Applicata*, 1932, volume 22, pages 433-440.

—o—

Filled cake soap is made from a completely saponified mass produced by subjecting to an intense disrupting and dispersing action in special apparatus a sirupy mass comprising soap stock, saponifying alkali and a filler such as silicate. The materials are contained in this mass in a fine state of division and uniform dispersion. The mass is sprayed while in this state, dried to a suitable degree and the droplets of the spray are compacted



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to form cakes of homogeneously and finely filled character. P. M. Travis. United States Patent No. 1,874,388.

—o—

The following procedure is used to determine the rancidity number of a fat or oil. One gram of the oil or fat is dissolved in one cc. of carbon tetrachloride and two cc. of glacial acetic acid. Then 0.1 gram of finely powdered potassium iodide is added and after five minutes shaking the whole is titrated with 0.01 normal solution of sodium hyposulfite. The degree of rancidity is the number of cc. of 0.01 normal sodium hyposulfite required per gram. The rancidity number is 1.27 times degree of rancidity. L. Szahlender. *Magyar Gyog. Tarsas. Ert.*, 1932, volume 8, pages 58 to 69.

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The great mass of physico-chemical research work on soaps, carried out within recent years, and the X-ray spectrographs of films of most of the fatty acids have definitely proven that these acids form a chain ending in a carboxylic group with only one hydroxyl group. The space occupied by the hydroxyl group can be calculated. Oleic acid is an exception.—W. Thevenaz. *The Chemical Trade Journal and Chemical Engineer*, 1932, pages 395-396.

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Castor and Turkey Red Oil in Soap

The utility of castor oil in the manufacture of soaps depends mainly on the transparency of the alkali salts of the oil, and on the smoothness of the hard soap produced by admixture therewith. Furthermore castor oil soaps are very resistant to rancidity and increase the lathering properties of soaps. The quantity of castor oil soap added to a hard, boiled soap is limited, and due to the difficulty of salting-out the mixed soap, many soap boilers will not use it. No more than three to five per cent castor oil soap should be mixed. The substitution of castor oil soap by ricinoleic acid is claimed to be neither economical nor advantageous technically. The luster and appearance of the curd soap made under these conditions are impaired. Castor oil is unsuitable for the production of soft soaps. Castor oil is most useful in making transparent, glycerin soaps. Castor oil has been suggested as a constituent of the stock used in the manufacture of completely-saponified, cold-process soaps, but there are other fats far more suitable for this purpose. The oil is, however, well-suited for making liquid soaps, preferably in the proportion of about 30 parts of castor oil to 70 parts of coconut oil or palmkernel oil.

The manufacture of turkey red oil (sulfonated castor oil) is discussed. Its use in making hard-water soaps is also considered from various angles including the highly important one of the degree of sulfonation of the oil. The solubility of the sulfonated oil depends on the content of ricinoleic acid ester and on the absence of much poly-ricinoleic acids. Josef Grosser, *Allgemeine Fett und Oel-Zeitung*, 1932, pages 546 to 553.

New Type Liquid Shampoos

New cleansing agents, which are almost colorless and which lather well, are made from derivatives of the higher fatty acids. It is claimed that these products are superior to the best grades of soap as regards detergent and lathering properties. Furthermore, they do not form insoluble precipitates with the hardness salts of water and the pH value of their aqueous solutions varies between 4.5 to 6.5. This latter property is of considerable importance as the soap does not irritate the skin. These new detergents have been prepared by Welwart who discusses them in detail in his article in *Die Seifen, Oel, und Fettindustries*, 1932, pages 378 to 379.

According to Welwart, a good, toilet soap, which contains 78 to 80 per cent of fatty acids, has a pH of 10.1 to 10.2 in 0.25 per cent solution. The treatment of the hair with soap solutions of such high pH injures it, and the higher the temperature of the solution and the longer the duration of the treatment, the greater will the injury be. The mechanism of hydrolysis of aqueous soap solutions is also explained and held responsible for injury to the hair. The fatty acid, liberated by the hydrolytic splitting of the first molecule of soap, will combine with a second, non-hydrolyzed molecule, with the result that the caustic alkali formed simultaneously or the hydroxyl ions make the solution alkaline. The free alkali then combines with the keratin of the hair, resulting in decrease of hair strength and dulling of its luster.

The new shampoo does not have these disadvantages. It is made from higher molecular weight fatty acids, which contain polar hydroxyl groups. These acids are naturally insoluble in water, but they are rendered soluble by the addition of groups which are combined with the oxygen in the molecule or directly with carbon. However, the concentrated solutions of these detergents deposit considerable dissolved product, even at temperature of about 20 degrees C. Clear, concentrated, liquid preparations of lemon-yellow color, which remain clear even at temperature of 8 to 10 degrees C. are made by combining the fatty acid derivatives with suitable aromatic compounds.

While no further details are given on the manufacture of these detergents, their properties are described in full. They lather well in any kind of water, no matter how hard. They do not irritate even the most sensitive skin. They can be perfumed without becoming cloudy. They are easily superfatted which is not possible with ordinary liquid soaps. Their solution in water is antiseptic. Their detergent action on all kinds of dirt, grease, oil, etc., is striking.

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Spermaceti oil, after being sulfonated with about 30 per cent of sulfuric acid, is readily saponified by boiling with caustic lye. The resulting soap mixture may be used for making toilet soaps, solvent soaps, etc. Deutsche Hydrierwerke A.G. British Patent No. 377,536, filed November 11, 1931.

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This photograph shows whole achenes, 3 times actual size. It is practically impossible to extract the active principles from whole mature achenes.

This photograph shows a coarse grind, similarly magnified, with some achenes left whole through improper grinding, preventing efficient extraction of pyrethrins.

This photograph shows flowers correctly ground, similarly magnified, with achenes properly broken to permit efficient extraction.

thrin content. Only lots that contain .90% pyrethrins or more, as certified by our Japanese laboratory, are accepted by us. The importance of these tests is shown by the fact that approximately 30% of the lots offered are rejected by us.

Write us for quotations on ground pyrethrum flowers. In addition, McLaughlin Gormley King can also supply whole or powdered pyrethrum flowers, or Pyrocide 20, a concentrated standardized pyrethrum extract, for which prices and terms may be obtained by insecticide manufacturers upon request.

WHOLE ACHENES CANNOT BE FULLY EXTRACTED

ONLY traces of pyrethrins are obtained when whole mature achenes (seeds) are extracted. The seeds of the flower head contain by far the greatest part of the pyrethrins. The percentage of active principle derived from the flowers depends largely on the proper grind of the achenes. On the other hand, if the flowers are ground too fine, they may clog your percolator.

Rotenone and Pyrethrins

C. B. Gnadinger and C. S. Corl, of our laboratory, have recently conducted experiments to determine the relative killing power of rotenone and pyrethrins as fly spray ingredients. These experiments are described in detail on pages 1237-1240 of the December issue of Journal of Economic Entomology. Reprints of this article may be obtained upon request.

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PETRODOR No. 1

is the name of our new product which modifies the kerosene odor in fly sprays. Kerosene smell needs to be modified! And with PETRODOR No. 1 you can do it for a very, very small cost. It is completely soluble — non-staining — and leaves a fragrant odor after spraying.

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Certified Coal-Tar Disinfectants

are known and used throughout the world because of their quality, dependability and efficiency. They are supplied only in concentrated form, dilute readily with water to form rich, milky emulsions, which do not separate on standing, and have a good clean odor of tar. Each batch is tested for germicidal strength.

Cresol Comp. U. S. P.

also known as Liquor Cresolis Compositus, U. S. P., is made in exact accordance with the specifications of the U. S. Pharmacopoeia. Phenol coefficient 2½ to 3. Dilutes with water to form clear, amber-colored solutions. Largely used by the medical profession, hospitals and veterinarians.

Crestall Fluid

is similar in composition, appearance and odor to Cresol Compound, U. S. P., but prepared from refined cresylic acid as a base. Approximately twice as strong as the U. S. P. product, and very effective in preventing the spread of animal diseases. Approved by U. S. Bureau of Animal Industry.

Mosquito Larvaecide

A coal-tar product employed for killing mosquito larvae. Effective in dilutions of 20,000 to 40,000 to one. Superior to petroleum oil, as it is not affected by rainfall or wind and does not involve fire hazard.

Pes-Tox Insecticide

of the pyrethrum type, pleasantly scented. Quickly kills practically every type of crawling, flying and hopping insect. Light lemon color. Especially effective when used in the form of a spray.

Pine Oil Disinfectant

A fragrant pine product, made from pure steam-distilled pine oil according to the formula of the Hygienic Laboratory of the U. S. Public Health Service. Mixes freely with water to form good white emulsions with pleasant pine odor. Free from mineral oil or other adulteration.

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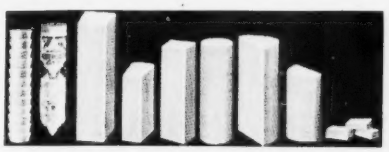

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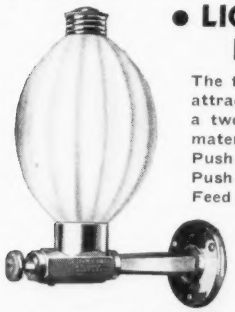

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Push-in Valve type (illustrated) and Push-up Individual Dispensers—Gravity Feed Equipment. Portable and Wall type Dispensers for Hospitals. Made in our own shops of top-notch materials. Yet priced surprisingly low.

• LIQUID TOILET SOAPS

Concentrated 42% Soaps made of finest edible Cochin Cocoanut Oil or Olive Oil—bland, neutral, absolutely pure and free of fillers or adulterants. Also Prepared Soaps to meet any specifications. Special soaps for Industrial and Surgical use and pure Castile Infants Soap for hospitals.

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High-grade Metal Polishes which remove tarnish but do not scratch or blemish brass, silver, copper, etc. Fine quick-drying Furniture Polishes. Non-inflammable and easy to apply.

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A type for every floor—to meet any price requirement. Safe, neutral cleaners for fine wood, tile, marble, linoleum, cork, rubber, rubber tile, terrazzo, travertine floors. Approved by leading manufacturers for fine flooring as well as for Furniture, Wainscoting, Painted, Enameled and Varnished Surfaces.

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Neat distinguished perforated containers, made of 24 gauge heavy metal—equipped with lock and sliding back.

In White Enamel, Porcelain, Oxidize or Nickel Plate with your nameplate or plain.

In three sizes:—

Large 3¼" x 3¼" x 9¾"—Holds 40 oz. bloc
De Luxe 2¾" x 2¾" x 8" — " 25 or 16 oz. bloc
Aerzonette 3½" x 1½" x 1½"— " 4 oz. bloc

Can be supplied plain or with your nameplate.

• DISINFECTANTS

Of Pine Oil containing 70% pure steam-distilled pine oil (Disinfectant—germicide—cleaner and deodorant in one)—also lower cost Pine Disinfectants and Deodorants. Coal-tar Disinfectants ranging from high-cofficient 18-20 to low-priced products made to sell at a price. Liquid and Powder Chlorine Disinfectants. Each batch tested and germicidal strength guaranteed.

• SOAP AND SHAMPOO BASES

Made from special blends of Cocoanut or Olive Oil—concentrated to 65% soap solids—producing more soap per pound than average base and making fine bland generous-lathering soaps.

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Mopping Varnishes—Quick-drying rubless Waxes—Floor Sealers, etc. Special finishes for linoleum, terrazzo, tile, cork, slate, marble, concrete, travertine, magnesite, quarry, rubber, rubber tile, soft asphalt and bitumen floors. Let us solve your special floor problem.

• INSECTICIDES—MOTHICIDES

High - powered but non - poisonous stainless and odorless fly sprays meeting the Insecticide and Disinfectant Manufacturers' standard. Also Concentrated Fly Spray (may be diluted with 19 parts petroleum oil to make 20 gals. full strength spray). Ready - to - sell Insecticides—Specifics for Bedbugs—Mothicides—Larvaecides —Mill and Weevil Sprays.

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The modern prerequisite is that a fly spray be odorless—or that it be very slightly and pleasantly perfumed.

Neither is possible if ordinary Kerosene is used.

DEO-BASE is especially well adapted for use with odorless pyrethrum extracts.

DEO-BASE offers new sales opportunities and therefore increased profits for you.

DEO-BASE conforms in every detail with the specifications of the National Association of Insecticide & Disinfectant Manufacturers.

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PERFUMES for SPRAY PRODUCTS—

OUR line of perfume odors for fly and theatre sprays, para blocks, household insecticides and allied products has been *laboratory tested.* By designating a perfume as a *spray odor,* we are certifying that it has been tested and proven successful both as to covering power and odor value. Try us out. Send a sample of your product—unperfumed—expressing a preference as to perfume if desired.

UNCO WATER-KLEER perfumes—a new series of perfume compositions, treated by a special process rendering them completely soluble in water without the use of alcohol. Simply dilute them in distilled water. They will not cloud or separate.

All types $2.75 per pound

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. . . . . *March 16, 1933*

THE Eighth Annual Dinner for the DRUG, CHEMICAL, and ALLIED TRADES will be held at the Hotel Waldorf-Astoria, New York, on Thursday evening, March 16th, under the auspices of the Drug, Chemical and Allied Trades Section of the New York Board of Trade.

This is the outstanding dinner of the year for the chemical, drug, essential oil, toilet goods, soap, insecticide, and associated groups. Twenty-five leading associations and trade groups are cooperating. Delegations from many cities of the Middle-West and East will be present. The attendance last year was close to 800!

Everybody will be there. Why not make up a table of ten for your company?

For further details and reservations communicate with Ray C. Schlotterer, Secretary, Drug, Chemical and Allied Trades Section, New York Board of Trade, 41 Park Row, New York.

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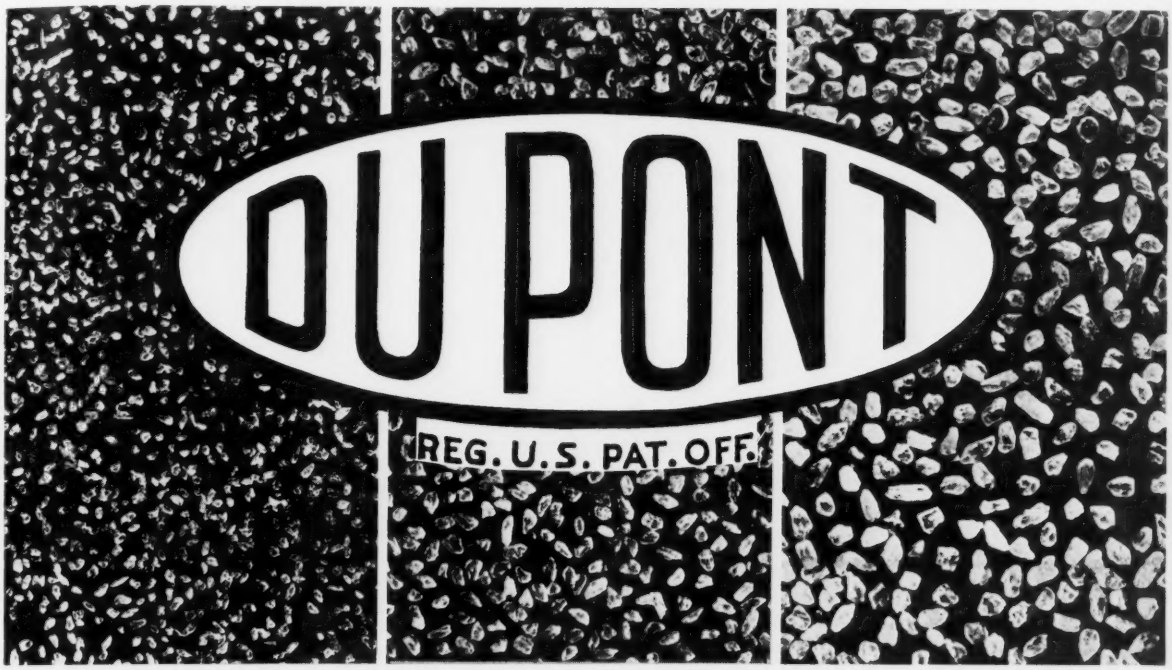

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From a Fad to a Fact

A few years ago, some bright spirit put perfume into a kerosene fly spray. Some said it was a fad, but it sold goods.

Today it's an accepted fact. *Insecticides, deodorants, disinfectants*—all must be rendered less objectionable, by adding to them a pleasant odor.

Now we've all gone a step further. We've found out what kind of odor does the work best, *without interfering with the insecticidal value* of the preparation.

Not every so-called insecticide perfume is safe to use, as many ingredients tend to counteract the effectiveness of the pyrethrum.

You want your insecticide to work well and sell well. Our perfumes not only help the odor, but they are especially designed *not* to hinder insecticidal activity.

Send for samples.

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Perfumes for Insecticides

For insecticides made with pyrethrum and kerosene, we suggest using one to six drams of any of the following oils in one gallon of finished spray.

Orange Blossom No. 96	$4.00 lb.	Rose No. 12	$2.00
Orange Flower No. 11	3.00	Lilac No. 1	3.50
Orange Flower No. 12	2.00	Lilac No. 2	3.00
Cedar No. 11	2.00	Lilac No. 3	2.50
Cedar No. 12	1.00	Lilac No. 4	1.10
Jasmin No. 11	2.50	Lilacine No. 11	1.10
Jasmin No. 12	1.50	Vanilla Bouquet for Spray	3.00
Lavender No. 135	1.00	Bouquet No. 118	1.50
New Mown Hay No. 11	3.75	Bouquet No. 11	3.00
New Mown Hay No. 12	1.50	Bouquet No. 12	2.00
New Mown Hay No. 13	2.00	Spray Odor No. 195	4.80
Oriental	1.50	Spray Odor No. 353	4.50
Narcissus	2.25	Spray Odor No. 457	3.75
Violet No. 11	3.00	Spray Odor No. 276	3.00
Violet No. 12	1.75	Spray Odor No. 259	2.00
Mint No. 11	1.50	Spray Odor No. 11	5.50
Mint No. 12	1.00	Spray Odor No. 12	5.00
Honeysuckle No. 11	3.25	Spray Odor D. No. 5	5.25
Honeysuckle No. 12	3.00	Spray Odor No. 23	4.50
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Perfumes for Deodorizing Blocks

Special solutions to be used from 1 to 2 pounds to 100 pounds of deodorizing crystals. They can be used with *either* paradichlorbenzene or naphthaline, or a combination of the two. *Any of the following colors may be used with any of the odors listed below.*

Colors

Amber
Blue
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Light green
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Bouquet—many bouquets to choose from, state type wanted.
Cedar
Hay
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Lilac
Lily
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Orange
Oriental
Peppermint
Pine
Rose
Violet

Grade A—any of the above odors with or without color..$2.50 lb.
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For over a quarter
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DISINFECTANTS

for the wholesale trade

BAIRD & McGUIRE, Inc.

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MEMBER NATIONAL INSECTICIDE AND DISINFECTANT MFRS. INC. 1914 INC.

Say you saw it in SOAP!

INSECTICIDE AND DISINFECTANT SECTION

A Department of SOAP

SOAP is official publication of *The National Assn. of Insecticide and Disinfectant Manufacturers.*

Insecticide Prices

THE opinion prevails in some quarters of the insecticide industry that the chief drawback to the expansion of retail sales of liquid insecticides is price. It has been pointed out that 59 cents for a pint can or bottle of insecticide is a price sufficiently high to prevent buying except in cases where insect infestation is serious. The introduction of the low price products,—and usually low grade as well,—is laid directly at the door of the high prices for the well-known standard liquids.

The public knows little about the things which stand behind insecticide quality. It does know plenty, however, in this day and age about price. On the whole, twenty-five cents is probably spent with greater reluctance today than a dollar was two or three years ago. Liquid insecticide prices have been reduced, and much has been made of it in advertising. But, considering nothing but the movement of goods across the retail counter, are they still too high? What relation is there between retail prices and carry-over stocks on the shelves of jobbers and dealers today?

We do not recommend price cuts of any kind, but we do recommend a real study of prices and their bearing on sales. It is a subject of importance right now in which every insecticide manufacturer is vitally interested. Why not a special committee of the National Association of Insecticide & Disinfectant Manufacturers to report at the summer meeting next June in Chicago?

—o—

From England comes the word that seventeen separate types of dangerous germ life have been found in the blood-sucking equipment of the bed bug, all being types which are communicable to the blood stream of the host. This is an extremely interesting finding from the point of view of the sale of household insecticides for use against this insect. Like the moth, the bed bug has been only a minor sales argument in the advertising of liquid insecticides. He has probably been a major sales argument without the manufacturer knowing it. Why is he not worth more attention by the manufacturer? Maybe all these women who have been buying fly spray ostensibly for use against flies and mosquitoes, have not been using it against these insects.

—o—

Dr. R. C. Roark, Chief of the Insecticide Division of the Bureau of Chemistry & Soils, Washington, has issued A Second Index of Patented Mothproofing Materials, dated Feb., 1933. The new index covers mothproofing patents issued since the first index was put out by Dr. Roark in 1931. A valuable contribution which will be published in part in a later issue here.

National Assn. of Insecticide and Disinfectant Manufacturers

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Active—Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues—$75.00 per year.

Associate—Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—$50.00 per year.

For further details, communicate with

NATIONAL ASSOCIATION OF INSECTICIDE & DISINFECTANT MANUFACTURERS

Harry W. Cole, Secretary
HOLBROOK MASS.

Notes of the Trade

H. W. Hamilton of the Koppers Products Co., Pittsburgh, who has been located in the main office of the company in that city for the past four years, transferred his headquarters on Feb. 10 to the Kearny, N. J., office of the White Tar Co., a Koppers subsidiary. Mr. Hamilton was associated with the White Tar Co. for a number of years prior to its acquisition by the Koppers interests. He is a past president of the National Association of Insecticide & Disinfectant Manufacturers, having served in 1928 and 1929.

—o—

John Sunshine Chemical Co., Chicago, has been formed to manufacture sanitary specialties by John Sunshine, former sales manager of the Hercules Chemical Co., New York since 1923. The company is located at 604 West Lake St., Chicago.

—o—

Gordon M. Baird, son of C. Campbell Baird, president of Baird & McGuire, Inc., Holbrook, Mass., is now associated with his father in that company. C. Campbell Baird was recently elected a director of the Randolph Trust Co., Randolph, Mass.

—o—

American Fluoride Corp. formerly at 599 Washington St., New York, has taken new quarters at 151 West 19th Street.

—o—

Barnett Janitor Supply Co., formerly at 278 Pearl St., New York, where they occupied the ground floor and basement of the building at that address, have moved next door to number 276. In the new location they are using the entire five story building.

—o—

J. L. Hopkins, J. L. Hopkins & Co., New York, was elected president of the Columbia County Association at the annual meeting held at the New York Athletic Club, January 14.

—o—

George M. Armor, vice-president of McCormick & Co., was again named president of the Baltimore Drug Exchange at the recent annual dinner.

—o—

A new device being installed in flour mills to kill weevils and weevil eggs is the "Entoleter," which passes the packages through a zone of high-frequency high potential corona.

—o—

The division of agricultural and food chemistry of the American Chemical Society is planning a symposium on insecticides as one of the features of the 85th meeting of the American Chemical Society which will be held in Washington, March 26-31. It is planned to hold at least one session for general papers on this subject.

Recent Advances in Disinfectants and Antiseptics

By Dr. Emil Klarmann*

Chief Chemist, Lehn & Fink, Inc.

SINCE the publication of the last yearly survey of progress made in the field of disinfectants and antiseptics, a considerable number of papers and patents were published, indicating a growing interest and an increasing activity in this scientific domain, which is a part of the borderland of chemistry and bacteriology and reaches over into the adjoining fields of sanitation, hygiene and other medical subjects. It is particularly gratifying that a considerable amount of new fundamental data has been added to our store of knowledge, since thereby the antibacterial effect of an individual substance or process eventually ceases to be a disconnected, fortuitous, strictly empirical phenomenon, and becomes one based upon a functional relation between the chemical (or physical) nature of a whole group of agents with certain common characteristics, and their action on bacteria.

Theory of Antibacterial Action

The question regarding the nature of the antibacterial action is always intriguing. What exactly does an antiseptic or a disinfectant "do" to the bacterial cell or group of cells? It is not necessary to enter into a discussion of the well known theories which correlate the damage done to a bacterial cell by a disinfectant agent or process, with a change in the state of dispersion of the bacterial colloids, notably proteins. J. H. Quastel and collaborators have shown that it is possible to suspend certain phases of the normal life of the bacterial cell by treatments affecting the activity of the bacterial enzymes. As early as 1898, Duclaux advanced the theory that the bacterial cell carries on all its functions through its enzymes, and that the cell itself is inert. The disturbance or cessation of enzyme activity could be made, therefore, the basis of a theory of disinfection were it possible to show that the action of enzymes is inhibited or destroyed by the same chemical or physical agents which are destructive of bacterial life. A compilation of pertinent facts by Isaacs (1) shows that actually this is the case. Thus both enzymes and bacteria are affected by heat, light and chemicals. Furthermore, there is no bactericidal substance known that does not exert a deleterious action on enzymes. In a dry condition, both enzymes and certain bacteria are more resistant to heat. Both show a remarkable resistance to cold. The rates of both the germicidal action and of the inactivation of enzymes correspond to a monomolecular reaction. Certain salts of heavy metals are very effective inhibitors of enzyme activity and of the multiplication of bacteria; but both these effects often may be counteracted by treatment with sulfides. The coagulation theory of disinfectant action is not incompatible with the enzyme theory, since enzymes are either proteins themselves, or associated with proteins so closely that they coagulate in the presence of agents which act on proteins.

Methods of Disinfectant Testing

A contribution of major importance is the new Circular No. 198 of the U. S. Department of Agriculture published in December, 1931. G. L. A. Ruehle and C. M. Brewer are its authors (2). The purpose of this publication is to place the testing of antiseptics, disinfectants and other substances, for which claims of antibacterial efficacy are made, upon a uniform basis. On the whole, this objective has been reached very successfully.

Germicidal Action of Inorganic Agents

Investigations of a fundamental character were carried out by C.-E. A. Winslow and his collaborators. Winslow, Walker and Sutermeister, working with Es. coli, studied the effect of sodium chloride upon bacterial growth (3).

Watkins and Winslow carried out an investigation of the rate of mortality of bacteria exposed to alkalinity and heat using Es. coli as the test-organism (4). They found that the reduction of cell numbers proceeds at a generally logarithmic rate. The rate of mortality of a cell population exposed to alkali or heat varies with at least four factors, viz., the age of the source culture, the cell concentration of the inoculum, the intensity of the toxic agent and the temperature.

Levine, who for some time past, has been studying the germicidal action of alkalies and the effect of salts upon it, published a new paper on this subject in collaboration with Lowman and Buchanan (5).

A very interesting paper, dealing with the natural and acquired resistance of Es. coli to the inhibitory and the germicidal effects of cations, was published by Borman (6). The microorganism was exposed to the chlorides of potassium, sodium, magnesium, barium, calcium, iron, copper, lead and mercury. The critical bacteriostatic and germicidal concentrations expressed in the minimum molar concentrations, capable of these effects were determined. It was also found that the resistance to magnesium and mercury could be increased by means of transfers; thus, e.g., one strain could be made to tolerate thirty times the original concentration of the mercury salt after seventy-nine serial transfers. It is also noteworthy that an acquired resistance to the bacteriostatic action of magnesium and mercury induces a comparable, non-specific increase in the resistance to other cations.

The bactericidal action of hydrogen sulfide is greater against cocci than against bacilli and most marked against Gram-positive types according to Douris and Beck (7). Motile bacteria are usually more resistant than non-motile ones.

Experiments with staphylococci, Es. coli and anthrax spores conducted by Selter and Fetzer (8) attest to the good germicidal qualities of sulfurous acid.

The germicidal action of tin compounds was studied by Kolmer, Brown and Harkins (9). The investigation comprised both inorganic tin salts and also organic tin combinations such as o-toluidine stannochloride, tin acriflavin and others.

Only brief mention can be made of two papers on the oligodynamic action of metals, viz., that by Dietzel, Schlemmer and Hammann (10) dealing with the antibacterial action of silver deposited on adsorbing materials (carbon, silica, etc.) and that by Markvoort and Wieringa (11) on the sterilization of river water by means of katadyn-silver.

Veraart and Drenth (12) compared the action of iodine with that of other substances in vitro and concluded that tincture of iodine is one of the most efficient antiseptics. A thorough study of the germicidal action of iodine solutions was carried out by Gershenfeld and Miller (13).

Phenol and Polyphenol Derivatives

A number of papers and patents dealing with this important group of organic bactericides have come to our attention during 1932. Recent developments tend to indicate that the disinfectants of the future will be drawn from this field of organic synthesis.

Read and Miller (14) studied the effect of substitution by aliphatic groups of phenols upon germicidal action. Coulthard and Pyman (15) contributed further experimental data on the subject of normal amyl cresol which they found previously to be a very effective germicide. The following phenol coefficients will give an idea of its potency: B. typhosus 250, B. coli 200.

*Before Natl. Assn. of Insecticide and Disinfectant Mfrs., Dec., 1932.

Staph. aureus 220, Streptococcus faecalis 200. Inhibitory action is observed in dilutions of from 1:10,000 to 1:20,000. The toxicity of normal amyl cresol is claimed to be only one-half that of hexyl resorcinol.

The investigation of the antibacterial action of monoethers of dihydric phenols which Klarmann, Gates and Shternov started last year with the series of resorcinol derivatives was continued and brought to a preliminary conclusion with two papers on the monoethers of hydroquinone and of pyrocatechol (16). A comparison of the three groups of dihydric phenol derivatives shows that the monoethers of resorcinol possess the greatest bactericidal efficacy. The germicidal action upon the Gram-negative organisms, B. coli and B. pyocyaneus follows that of B. typhosus, while there is a close resemblance in the reactions of Streptococcus hemolyticus and of Staphylococcus aureus; Vibrio cholerae, though a Gram-negative micro-organism resembles the Gram-positive cocci in its extreme sensitiveness, particularly toward the higher-molecular compounds of these series.

Numerous dihydroxy-alkyl diphenyl methane derivatives were synthetized and studied by Harden and Reid (17). Among these compounds there are several highly effective germicides.

Halogen derivatives of monohydroxy-diphenyl methane were prepared and their antibacterial action was studied by Klarmann, Gates and Shternov (18). The phenol coefficients of the compounds of this series run up to 83 with respect to B. typhosus and up to 920 with respect to Staphylococcus aureus. One of the derivatives studied, 5-chloro-4, 6-dimethyl-2-hydroxydiphenylmethane, inhibits the growth of Staphylococcus aureus in a dilution of 1:150,000.

A patent on the preparation of heptyl phenol was granted to Fanto; the compound is stated to be a strong germicide (19).

Another new group of phenol derivatives are the hydroxyphenyl alkyl and aryl sulfides. Suter and Hansen (20) who prepared a series of para-hydroxyphenyl alkyl sulfides find them to be more effective bactericides than the corresponding oxides. The normal amyl derivative is the most effective of the series against B. typhosus, the normal hexyl hydroxyphenyl sulfide is the most effective against Staphylococcus aureus. A comprehensive study, involving diphenyl sulfide derivatives, was carried out by Moness, Braker and Christiansen (21). These authors also investigated the antibacterial action of a number of mercury derivatives, but found them to show no greater efficacy than the sulfides from which they were derived. The ethers of aryl phenolic sulfides show very low germicidal activity, thus indicating that the sulfur linkage alone is not the cause of the high potency of the "open" hydroxy derivatives of this series.

Esterification of hexyl resorcinol with sulfuric acid leads to an ineffective compound. According to Grewal (22) the sodium hexyl resorcinol disulfate has no antiseptic action upon Staphylococcus albus in a dilution of 1:500 and no germicidal action in one of 1:10 in 24 hours. Unlike the parent compound the sulfate is not capable of reducing the surface tension of water.

The germicidal action of certain chloro-derivatives of alkyl phenols (chlorocresol, chloroxylenol and chlorothymol) is the subject of a paper by Etinger-Tulczynska and Ulrich (23). Several dichlorophenol derivatives were prepared and studied bacteriologically by Tanaka and Morikawa (24).

An investigation of considerable practical importance is that carried out by Tilley and Schaffer on the effect of alkali, glycerin and alcohol upon the germicidal action of phenol and of a number of phenol derivatives (25).

Organic Acids

An interesting paper on the antibacterial action of organic acids was published by Reid (26). Using several test organisms this author established among other things that there is no relation between the germicidal and inhibitory action of acids; acids which are highly germicidal may show little inhibitory capacity and vice versa. Hydroxy acids and dibasic acids are more toxic to bacteria than monobasic acids. Other parts of this work have to do with the relation between molecular weight and bactericidal potency, surface action and the effect of organic matter.

A chapter of an investigation of almost classical proportions, dealing with the action of certain aliphatic and alicyclic acids upon the germ of leprosy was brought to a conclusion with the publication of a summarizing paper by Adams and his collaborators (27). This work aims at the preparation of synthetic chemicals for the treatment of leprosy which would not have the disadvantages of chaulmoogra oil now used almost exclusively.

The paper by Sabalitschka and Tietz (28) on the antibacterial action of alkoxy- and of polyhydroxybenzoic acids and their esters represents another addition to the series of systematic researches in the field of aromatic hydroxy-acid esters begun by the senior author some time ago. The bactericidal and bacteriostatic effect of hydroxyphenylboric acid and its substitution derivatives is the subject of a paper by Bean and Johnson (29).

Organo-mercury Derivatives

Only very brief reference can be made to the several papers chosen for mention in this report. A rather comprehensive investigation of the bactericidal and fungicidal action of phenyl mercury nitrate and chloride was carried out by Weed and Ecker (30). The very great inhibitory and germicidal potency of phenyl mercury nitrate is illustrated by the following minimum inhibitory and germicidal concentrations: with Staphylococcus aureus 1:625,000 and 1:50,000 respectively, with B. typhosus 1:375,000 and 1:62,500 respectively.

A patent granted to Russel and Melton (31) on mercury ricinolate claims for this chemical a strong germicidal action, low toxicity, lack of irritating qualities, non-coagulation of albumen and capacity of depressing surface tension.

A comparison of mercurochrome with tincture of iodine, with specific reference to veterinary practice was carried out by Kelser and Mohri (32). The results of a rather extensive investigation of mercurochrome, authorized by the Council on Pharmacy and Chemistry of The American Medical Association, were published by Oettingen, Calhoun, Badertscher and Pickett (33).

Attention is called also to the papers by Macht and Cook (34) on merodicein (hydroxymercuridi-iodoresorcin-sulfonphthalein and by Powell, Jamieson and Kempf (35) on merthiolate.

Menthol

Wokes (36) studied the germicidal action of the natural l-menthol and of four of its isomers and found the isomers superior to the l-menthol when tested against B. coli and Staphylococcus aureus. l-Menthol itself shows from five to eight times the activity of phenol.

Quinine

Quinine shows considerable inhibitory action upon the tuberculosis germ according to a paper by Levy (37).

Turkey-Red Oil Emulsions

Experiments with turkey-red oil emulsions of trichloroethane, chloroform, chloral hydrate, chlorobenzene, ethyl- and isopropyl alcohols, carried out by Rimpau, Plochmann and Schneider (38) indicate that Turkey-red oil considerably increases the activity of these substances and imparts germicidal properties to substances which show no such efficacy when used alone.

Ultra-violet Light

Some papers on this subject deserve a brief review in this report, as the germicidal action of ultra-violet light is being made use of to an ever increasing extent.

Its action upon different micro-organisms is the subject of the papers by Collier (39) and by Ehrismann and Noethling (40). The addition of minute quantities of certain fluorescent dyes such as eosin or fluorescein considerably increases the bactericidal action of the ultra-violet rays, according to Welch and Perkins (41). This so called photodynamic effect is also evident in the case of fairly resistant micro-organisms which are killed in a few seconds in the presence of such photocatalysts.

Irradiation of petrolatum-lanolin mixtures with ultra-violet light imparts a bactericidal potency to it, according to A. T. Ross (42). Eising observed some remarkable results in the treatment of purulent wounds with irradiated petrolatum (43).

Concluding Remarks

It should be stressed that the work considered in this report, by no means represents all that has been done in this field. No mention has been made of the numerous new substances that might be of interest from the point of view of this report, as potential sources of antibacterial agents, for which, however, bacteriological data are not available at this time. The various references were selected rather arbitrarily, but with the view to a consideration of those papers which, in the opinion of the

writer, appeared to be of a more or less fundamental significance.

References

(1) M. L. Isaacs, Science 75, 46 (1932).
(2) G. L. A. Ruehle and C. M. Brewer, U. S. Dept. of Agriculture Circular No. 198 (Dec., 1931).
(3) C.-E. A. Winslow, H. H. Walker and M. Sutermeister, J. Bacteriol, 24, 185 (1932).
(4) H. Watkins and C.-E. A. Winslow, J. Bacteriol. 24, 243 (1932).
(5) O. H. Lowman, J. H. Buchanan and M. Levine, Iowa State College, J. Science 5, 251 (1931).
(6) E. K. Borman, J. Bacteriol. 23, 315 (1932).
(7) R. Douris and J. Beck, Ann de l'Inst. Pasteur 46, 73 (1931).
(8) H. Selter and Fetzer, Z. Bakteriol. I, Orig. 124, 369 (1932).
(9) J. A. Kolmer, H. Brown and Harkins, J. Pharmacol. 43, 515 (1931).
(10) R. Dietzel, F. Schlemmer and V. Hammann, Apotheker-Zeitg. 47, 244; 18, 261; 19, 283 (1932).
(11) A. J. Markvoort and K. T. Wieringan, Chem. Weekblad 29, 242 (1932).
(12) B. A. G. Veraart and J. B. Drenth, Nederl. Tijdschr. Geneesk. 76, 4096 (1932).
(13) L. Gershenfeld and R. R. Miller, J. Am. Pharm. Assn. 21, 894 (1932).
(14) R. R. Read and E. Miller, J. Am. Chem. Soc. 54, 1195 (1932).
(15) C. E. Coulthard and F. L. Pyman, J. State Med. 39, 599 (1931); Brit. J. Exptl. Pathol. 12, 331 (1931).
(16) E. Klarmann, L. W. Gates and V. A. Shternov, J. Am. Chem. Soc. 54, 298, 1204 (1932).
(17) W. C. Harden and E. Reid, J. Am. Chem. Soc. 54, 4324 (1932).
(18) E. Klarmann, L. W. Gates and V. A. Shternov, J. Am. Chem. Soc. 54, 3315 (1932).
(19) E. C. Fanto, U. S. Pat. 1,824,426 (Sept., 1931).
(20) C. M. Suter and H. L. Hansen, J. Am. Chem. Soc. 54, 4100 (1932).
(21) E. Moness, W. Braker and W. G. Christiansen, J. Am. Pharm. Assn. 21, 557 (1932).
(22) K. S. Grewal, J. Pharmacol. 45, 283 (1932).
(23) R. Etinger-Tulczynska and W. Ulrich, Z. Hyg. 113, 437 (1932).
(24) M. Tanaka and K. Morikawa, J. Chem. Soc. Japan 51, 275 (1930); C. A. 26, 709 (1932).
(25) F. W. Tilley and J. M. Schaffer, J. Agric. Research, 43, 611 (1931); J. Expt. Sta. Rec. 66, 370 (1932).
(26) J. D. Reid, Am. J. Hygiene, 16, 540 (1932).
(27) W. M. Stanley, G. H. Coleman, C. M. Greer, J. Sacks and R. Adams, J. Pharm. Expt. Ther. 45, 121 (1932).
(28) Th. Sabalitschka and H. Tietz, Archiv. f. Pharmazie 269, 545 (1931).
(29) F. R. Bean and J. R. Johnson, J. Am. Chem. Soc. 54, 4415 (1932).
(30) L. A. Weed and E. E. Ecker, J. Infectious Diseases 49, 440 (1931); 51, 309 (1932).
(31) J. Russel and H. E. Melton, U. S. Pat. 1,820,761 (Aug., 1931).
(32) R. A. Kelser and R. W. Mohri, J. Amer. Vet. Med. Assn. 80, 87 (1932); Expt. Sta. Rec. 67, 165 (1932).
(33) W. F. von Oettingen, O. V. Calhoun, V. A. Badertscher and R. E. Pickett, J. Am. Med. Assn. 99, 127 (1932).
(34) D. I. Macht and H. Cook, J. Pharmacol. 43, 571 (1931).
(35) H. M. Powell, W. A. Jamieson and G. F. Kempf, Am. J. Hygiene 15, 292 (1932).
(36) F. Wokes, Quart. J. Pharmacy & Pharmacol. April-June, 1932; P. E. O. R. 23, 291 (1932).
(37) A. J. Levy, Am. Rev. of Tuberculsois 23, 710 (1931); J. Am. Med. Assn., 97, 569 (1931).
(38) W. Rimpau, E. Plochmann and G. Schneider, Arch. Hygiene 107, 268 (1932).
(39) W. A. Collier, Z. Hyg. 112, 724 (1931).
(40) O. Ehrismann and W. Noethling, Z. Hyg. 113, 597 (1932).
(41) H. Welch and R. Perkins, J. Preventive Med. 5, 173 (1931); Z. Bakteriol. I. Ref. 104, 506 (1932).
(42) A. T. Ross, Proc. Soc. Exptl. Biol. & Med., 29, 1265 (1932).
(43) E. H. Eising, Annals of Surgery 43, 123 (1931).

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Some Tests on Disinfectants

By C. C. Baird*

President, Baird & McGuire, Inc.

FOR many years, the disinfectant industry has been plagued by having to explain to buyers of its products the difference between four or five different methods of testing disinfectants for phenol co-efficiency. We have had the original Ridael-Walker, the so-called modified Ridael-Walker, the Hygienic Laboratory and the American Public Health Association test, and now we have the Food and Drug Administration Test.

The Ridael-Walker test served a useful purpose for many years, as did the Hygienic Laboratory test. There appears to be among bacteriologists serious objections to all the previous methods we have used. There apparently are serious weaknesses in the R. W. and H. L. methods, which have rendered them not entirely satisfactory; gradually and over a period of years a modification of both these methods was made by the authorities at Washington and the food and drug administration have now published a method which leading bacteriologists tell me is an improvement over all the methods we have previously used.

During the past year we have made a number of comparative determinations in which the R-W method, the H. L. method and the F. D. A. method were employed in determining the phenol co-efficients of coal tar disinfectants. This was not done in a special study but during the ordinary course of business. Each sample of coal tar disinfectant was not tested by the same bacteriologist by all three methods in every case. The results are, nevertheless, of considerable value in judging the comparative figures obtained by each of these methods on the same disinfectant.

Seven coal tar disinfectants and two cresol compound disinfectants are included in this series. The phenol co-efficients of the coal tar disinfectants can be classified in three groups; those having a co-efficient of about three; those having a co-efficient of about five; and two having a co-efficient of about twenty. The results obtained on all these samples prove what has already been shown by previous workers, namely—that the phenol co-efficient figures obtained by these three methods on coal tar and cresol disinfectants are essentially the same.

It is interesting to note that the differences obtained by these three methods on the same disinfectant were no greater than would be obtained when separate tests are made by the same method. In other words, the variation in results which we always get when several tests are made with any one of the above three methods, is about the same as the difference in results obtained when all three methods are used in testing the same disinfectant. This is in accordance with results already reported by Reddish and Brewer, and also recently by Brewer and Ruehle. Dr. Reddish gave a report before the Association in the summer of 1929, which showed that the results obtained by the H. L. method, and the F. D. A. method are essentially the same.

As a result of my own investigation which has just been completed and of others which have already been published, it is clear that the use of the F. D. A. method or the phenol co-efficient determination of coal tar and cresol disinfectants would not have a disturbing effect on the industry. Considering the numerous advantages of this method, and considering the fact that it is the official method of the U. S. Department of Agriculture (Food and Drug Administration), it becomes necessary for us to again consider the advisability of adopting this method as the official Association method. Our bacteriologists have convinced us that the F. D. A. test is not only more simple to perform, but the results obtained are more accurate than those gotten by the use of the R-W and the H. L. methods.

For many years you and I have been listening to arguments pro and con of the respective merits of the Original Rideal-Walker Method, the Modified Rideal-Walker Method, the Hygienic Laboratory Method, the A. P. H. A. Method, and maybe others which do not come to my mind. Now, since the United States Department of Agriculture, through the Food and Drug Administration, has published the test known as the "F. D. A. Method"—this being the Method by which this Administration actually tests disinfectants, it would be a good time to "wash the slate clean" and concentrate on one method of testing. I believe that every one will agree that it would be a great relief to sellers of disinfectants from having to explain to buyers the difference between phenol co-efficients obtained by five or six methods if they were able to market their products by one method of testing.

I should like to hear an expression from some of the other members as to the comparative results obtained by the F. D. A. Method against the method they have been using, and if it is in order I should like to make at this time a motion that this Association adopt the F. D. A. Method as its official method of testing coal tar and pine oil disinfectants.

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The Trend in Insecticide Quality

By G. A. McLaughlin*

McLaughlin Gormley King Co.

I HAVE been asked to tell you about "The Upward Trend in the Quality of Insecticides." I am tempted to change the title to read: "The Upward Trend in the Quality of Insecticides—If Any." There can be no doubt that the quality of insecticides has been poorer rather than better in many instances during the depression. We all know of firms who have reduced the active principle content of their sprays, or who have put out cheaper sprays under another label, in order to garner some of this price business. Such practices are almost inevitable under the conditions which have existed.

To get down to examples, there is a certain new firm in the insecticide industry which in 1931 did a very small business. In 1932 it is rumored with some degree of reliability that more than 50,000 gallons of insecticide were sold. The price at which the product was offered to the public through dealers was nearly 50% less than any other we have had occasion to know about. A secret ingredient other than pyrethrum is claimed in the literature put out by this firm, although nothing is declared on the label. We tested a sample can purchased at a dealer's store. It gave a kill by the Peet-Grady method between 7% and 16%. The product is claimed to give a very high kill. The product is not worth the 50% lower price asked for it. Yet that is very difficult to explain to a buyer who is interested in turnover. The stores that have specialized on that spray have locked out the conscientious manufacturer from contact with the public, thus removing his most effective weapon in the quality argument.

Another and larger manufacturer has in 1932 for the first time put out a second quality under another label than his well advertised one. The cheaper product is sold in chain stores. It was reported unofficially that the new brand outsold the old by a considerable margin. We have never tested either the old or new brand, but it is safe to say that the new, cheaper brand will be poorer in quality unless the manufacturer is willing to do business at a loss. The chain store competition is fierce, and the prices the new brand would have to meet in order to gain the business would not permit an insecticide of the quality of the association standard.

Still another manufacturer, despite the availability of the best information on insecticides, continued in 1932 to put out a product of very inferior stamp. This producer had started out some years ago with a lot of misinformation about pyrethrum. Where he got it we were unable to find out. We were unsuccessful in convincing him that his product could be improved, even though we ran Peet-Grady tests before his eyes which gave kills less than 30%. He persists in putting out a poor product, naturally at a very low price. He gets business, especially from chain and co-operative independent stores, advertises nationally, maintains a large plant and force, and claims more for his product than should be claimed.

These are three relatively bad cases. There may be hundreds more, and their combined effect on our industry is something for us to be thinking about. It cannot be denied that too much of the insecticide reaching the consumer is not worth the price asked, even if the price is 50% less than the nearest competitor. Eventually, we hope, the public will find that out. We, as an association, should take what steps we can to see that the public is informed. Otherwise, consumers may form their opinions of insecticides in general from the results secured when using these inferior products. Even the public should be able to tell the difference in effectiveness between a product killing 7% and one killing 60% by the Peet-Grady method.

What can be done to improve this situation? This is not entirely within the subject assigned, but I cannot resist the opportunity to make a few points that may merit the time.

The chief weapon now available for fighting poor products is knowledge of the consumer as to what he is buying. Certainly not over 5% of counter buyers of insecticide know even that pyrethrum does the killing in fly sprays. Thousands think plain kerosene is sold to them at a fancy price. Supposing that the association printed several million pamphlets dealing plainly with known facts about the part played by pyrethrum in insecticides, and asked members to pack them in cases of the product shipped to dealers. Some proportion should reach an interested public, always anxious to know new and unusual facts. Some day I hope it will prove possible to subscribe a substantial sum of money for cooperative advertising in magazines and elsewhere. People need to know *why* a good insecticide costs more, and what more they can expect for their money from a satisfactory product. Then they may think twice before buying the 25c pint can, as compared with the 45c can.

"Unfortunately, we cannot expect much help from the government in this fight. The chemical history of pyrethrum is relatively new. There is not yet any reliable method with a narrow margin of error for testing the killing power of a completed product. Should some one be successful in developing such a method in the future, then it should be possible to require a statement on the label which would inform the buyer as to the exact quality of the insecticide he is buying. The most that can be said at present is that it has become possible for the ethical manufacturer to have exact knowledge of the quality at all times, of the insecticide he is producing. That is indeed an important forward step toward better products, because it seems as if a very large proportion of the manufacturers are conscientious.

Thinking back over the cases of backsliding on quality, it is apparent that the chief offenders are small concerns, having only a local business. We know of very few who have continued to put out poor products, who have continued to grow. While they are an important factor in the trade because the trend of prices in the whole industry must be toward their own low levels, nevertheless, the backsliders cannot be said to have dominated the industry. In the experience of our company, we can indicate two cases of improvement for one case of backsliding. In addition, the firms which have improved their products to our knowledge, are large and sound firms, doing a voluminous and usually national business, frequently running in excess of 100,000 gallons of insecticide per season. Many smaller firms have also deliberately stepped up their products.

There is the case of a middlewestern concern packing household insecticide and cattle fly spray, buying several carloads of each per season from a manufacturer percolating pyrethrum flowers with kerosene. In 1931 they specified that each gallon was to contain the active principle from one pound of pyrethrum flowers. They did not specify what kind of flowers, nor any kill test, under the misapprehension that if their sprays contained one lb. per gallon, the results would be satisfactory. Complaints poured in during the spring and early summer of 1931. The manufacturer asked us to check the material by the Peet-Grady method. One sample gave as low a kill as 8%. The company producing the sprays was at a loss, as they were actually putting in one lb. per gallon. The stock spray had a heavy neutral oil as a base. We recommended changing the oil to a lighter fuel oil, gravity 32 to 36°. The kill was somewhat improved. The company manufacturing the sprays volunteered to put in 2 lb. per gallon. Several carloads were delivered at this proportion and were much more satisfactory according to the checks which we ran for the packer. The cost of these deliveries must have been higher than the selling price, however, as the producing company was not willing to renew the contract price for 1932. Consequently, the packer purchased standardized concentrate in 1932, diluted it in his own plant with the proper oils, to a proportion that represented one lb. of flowers assaying 0.90% pyrethrins per gallon. He now reports the 1932 season completed without complaint. The cost was

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slightly less than in 1931, and his sprays were definitely improved.

In past years, states which purchase insecticides for use in institutions, have been at a loss as to specifications which would protect them from unsatisfactory deliveries. One large state entered into correspondence with a number of pyrethrum producers in an effort to prepare better specifications. When new specifications were sent out, they were much improved. Not only was the pyrethrin content of the flowers to be used specified, but also a kill test figure for the completed insecticide. Unfortunately, the good work was wasted because of two factors:

1—The kill test figure was entirely too high for most laboratories, undoubtedly set high because of a series of tests which may not have been properly run. Few would quote under the circumstances.

2—Political influence diverted the contract to a source which was finally unable to live up to the specifications. This is an example of how good work in improving the quality of a product can be dissipated.

Another instance of important improvement in the quality of a substantial amount of insecticide exists in the case of a large eastern farmer co-operative. This organization had been selling supplies to its members, and had recently decided to add cattle spray. As they expressed it, thousands of fly spray salesmen immediately swarmed like flies. All had some kind of sales story which sounded reasonable since the co-op had never handled fly spray before. After the din of competitive argument had died down, this co-operative purchased a 5 lb. concentrate, and recommended that the farmer add 1 gallon of it to four gallons of kerosene, lubricating oil, or whatever happened to be at hand. This completed spray, the label said, might be used on cattle, also in the air in barn or dairy. The concentrate made possible a nice story of saving the farmer money, which always appeals to a co-operative. However, as you can imagine, the results were not so good. The first summer was hot, very hot. Those cows sprayed with kerosene blistered and lost great patches of hair; those sprayed with dirty lubricating oil festered, fevered, and the complaints were thunderous. The technical people in the employ of the co-operative were bewildered, but not particularly concerned because, as you know, the co-operative can do no wrong. Nevertheless, after about fifty starts and as many stops, it presently became apparent to the co-operative that elsewhere than in the competitive claims of salesmen lay the full truth about sprays. The literature was reviewed, and the co-operative arranged for a local oil company to mix a standardized concentrate with the proper oil, the spray was labeled properly, and the next seasons were happy and profitable ones indeed for the co-operative and their farmer members.

One of the best known names in the household insecticide business made a recent improvement which will do more to step up the quality of the product than any thing else they could have done. The benefits do not stop with that particular brand, as many smaller concerns have done likewise. In other words, the improvement in quality of hundreds of brands may be the result. This came about during and immediately after publication of a very startling fact:—namely, that pyrethrins decompose when exposed to light in flint glass bottles. The research work revealed that 50% loss in killing power occurred in 13 months in insecticides packed in flint glass and stored in direct sunlight, 90% in blue glass, and no losses occurred in tin or amber glass. Consequently, insecticide which has been standing on a dealer's shelf or in his window for one year, as is frequently the case, has been materially damaged. The consumer could readily detect such a wide difference in killing power. The large firm I indicated started packing its product in tin, and improved the quality of a large proportion of its sales to the public. Similar changes by other insecticide manufacturers have been made, or are in process, so that it can be safely said that a major improvement in the quality of insecticide has been made.

Another improvement is occurring more slowly, but steadily. In this case also, a large number of firms are involved, and research work is directly responsible. It has been suspected for years that the killing power of pyrethrum flowers declined rapidly with age. The research work revealed that even in vacuum sealed coffee cans in which the flowers were protected from light and air, ground pyrethrum flowers lost 37.9% of their pyrethrins in 12 months. In commercial barrels, air tight drums, in bags, the losses were 30%-40%. From examination of the same samples, it has found that about ⅔ of this loss occurred in the first 6 months. Also from the examination of hundreds of tons of whole flowers imported over each of several years, very substantial losses of killing power were shown, progressing from the date of harvest. It became apparent to those insecticide manufacturers percolating pyrethrum flowers that these losses represent substantial dollar losses. Pyrethrum flowers are harvested in May, June and July, and reach the U. S. too late for the current insecticide season. Most flowers are actually percolated between December and July, and consequently most insecticide is produced from pyrethrum flowers that are substantially less effective than at harvest. As in any natural product, the flowers vary in active principle content at harvest as well as one year later. The pyrethrum manufacturer, therefore, if he desires a product of unvarying killing power, must do two very important new things: first, he must be equipped to select the highest quality flowers of the crop; second, he must increase the number of pounds of flowers per gallon of insecticide as the flowers age. Both steps cost money, and demand specialized equipment. It is encouraging to see the number of manufacturers that are taking these steps, thus producing better insecticides with mathematically accurate killing power no matter when they are produced. From the files of our company alone, I could name probably 25 firms taking these steps to improve the quality of their products. The largest one produces in excess of 400,000 gallons of insecticide per season, and several produce in excess of 100,000 gallons.

Another improvement will result from this work. Ever since Stuart Chase, the eminent economist, wrote the book "Your Money's Worth" claiming that consumers should save money by making their own toothpaste, disinfectants, and insecticide, the officials of agricultural colleges have heartily applauded. Consumers are now deluged with formulas circulated on stationery of some government institution, pointing out that a pound of insect powder bought from the corner drug store and dumped into a gallon of kerosene will save the consumer $4.30. Fortunately for us, up to this time, consumers have proved to be too lazy. Now, however, it is possible for us to show the philanthropic professor that the insect powder in the average store is practically useless, or at least badly damaged by old age. Several such circulars have been withdrawn since publication of the loss rate data. The results should be improvement, not only of the quality of the insecticides consumed, but also of the business volume going to manufacturers, to some small extent.

To sum up, the trend is definitely toward better insecticides on the part of larger, conscientious manufacturers. We believe that any tendency in the opposite direction is temporary, caused by the extreme price consciousness of the buying public under depression circumstances, and that as research work continues and the new information it releases is broadcast, better insecticides are bound to result. We shall continue to bend our own efforts in that direction.

—o—

Hydrogenated products, devoid of unpleasant odor and suitable as vehicles for insecticides, are obtained by hydrogenating a lignite tar oil at 390 degrees C. and 200 atmospheres pressure in the presence of tungsten sulfide catalyst. They may also be obtained by hydrogenating an oil, recovered from high temperature carbonization coal tar, at 350 degrees C and 200 atmospheres pressure in the presence of a catalyst comprising cobalt and molybdenum sulfides. The product is further treated with hydrogen at 300 degrees C and 100 atmospheres pressure in the presence of a nickel catalyst. British Patent No. 378,300.

—o—

Because a mouse jumped out of an ice cream cone which he was eating, a Staten Island resident recently sued the Whalen Drug Co. and was awarded a verdict of $500. The case was dubbed "The Mickey Mouse Case" in the courts and law offices of Staten Island, and was the source of much mirth, news reports stated.

Broadening the Insecticide Market

The Field Against Moths, Roaches, and Bedbugs

By F. O. Huckins*

Rex Research, Inc.

MY subject is "Broadening our Insecticide Market by Making the Public Conscious that our Household Liquid Insecticides also kill Moths, Roaches and Bedbugs in addition to Flies." We all know that the better pyrethrum liquid insecticides have somewhat the same effect on moths, roaches and bedbugs as on flies and mosquitoes, yet we have all concentrated our efforts upon getting our share or trying to get our share of the obvious market, that for use against flies and mosquitoes.

Let us look first at the reason for this procedure. In the beginning, when there were a few of us promoting and selling a liquid to kill household insects, it was principally a matter of convincing dealers and consumers that a spray would kill insects by contact. I can well remember the astonishment and surprise revealed by those who watched when they would see the flies drop. In searching for victims upon which to make demonstration, flies were most available, therefore rather than take the time to procure moths, roaches or other insects, and the statement that "it also kills moths, roaches, bedbugs, etc.," was given in a casual way with no sense of conviction, hoping that the dealer or consumer would believe it and use the product when the emergency arose.

We followed the line of least resistance and as long as business was good in the seasonal sale against flies and mosquitoes we were not very much disturbed. Probably a few half-hearted attempts were made to sell liquid insecticides for use against the other insects, but they have not been very effective. We just became accustomed to selling it for use against flies and mosquitoes and stuck to it. It has even influenced our own habits and unconsciously we have revised the term "household insecticide" to "fly spray." I venture to say that in using a word or phrase to express the chronological term more of us say "fly spray" than "household insecticide." I believe that I can go so far as to say that there are some here who are not convinced that a quality pyrethrum spray will kill moths, roaches, bedbugs, etc.

If we are to think of broadening this market we must first convince ourselves, then our salesmen, then the jobbers and dealers, and last—the consumers. There could be no benefit from saying that we will correct this situation by advertising to the consumer without first building up our case and convincing ourselves, our salesmen, our jobbers and dealers.

The dealer must be convinced beyond any question of a doubt that pyrethrum sprays *will* kill these other insects. Despite the fact that practically all of us have printed this fact on our labels for years, I am willing to venture the assertion that the average dealer has entirely disregarded these other uses. This is proved by the fact that after September all stocks are removed from the shelves and stored away as "carry-over." It may be true that pyrethrum sprays are not as highly effective against these other insects as against flies and mosquitoes—but the fact remains that it will kill them when used properly and as often as necessary. Many other commodities are recommended for a multiplicity of uses, despite the fact that they are not equally efficient in all cases.

Take Ivory Soap for instance. It is being promoted for every soap use. The average housewife knows that something other than a bar of Ivory may be more convenient, act quicker and do a more satisfactory job, yet having Ivory for everyday use they use it for washing dishes, clothes, lingerie, toilet and so on. This increases the consumption of Ivory and adds to P & G's volume.

I BELIEVE that the market for pyrethrum sprays can be broadened. In fact, I know it can. Our Canadian Company has done it very successfully. They have, during the last six or seven years, carried on a modest publicity campaign in consumer publications, during the off months. Not, however, without showing the dealer the advantage of keeping Fly-Tox on his counter every day of the year. It has been the practice every year during January, February and March to have small ads appearing in the papers promoting the sale of Fly-Tox for use against roaches, bedbugs and moths. During April and May the publicity is altogether on moths. Dealers are contacted by mail. Price display contests have been operated to very good advantage.

It is generally recognized that T. Eaton & Company of Toronto are leaders in business management and merchandising. It stands to reason that they would not fill up departments with unsalable merchandise. Eatons have a permanent insecticide counter. This activity in Canada on Fly-Tox has benefited makers of other brands because we are told there is a more or less steady sale on the one or two other brands that they sell.

To accomplish this in Canada has taken courage and consistent sales effort. Most of these "off season" sales are made on the moth appeal, yet the moderate promotion of roach and bedbug appeal keeps the goods on the counter and satisfies what demand there is for this use.

Generally speaking, I think that some of us have spent a great deal more money than necessary during the past, in advertising our products for use against flies and mosquitoes. We have all been striving to get the bulk of fly and mosquito market which is probably 60% to 70% of the possible demand and let the rest go because we have felt that the roach, bedbug and moth market was too thin. People are spending millions of dollars for products to combat these other insects. Many of the products sold are not as effective as a pyrethrum spray.

It is my belief that if we all do a little constructive thinking along this line we might improve the condition of the industry as well as ourselves individually. It is quite probable that if we took a little of the effort we have been exerting in telling the world that "WHATSIT" kills flies deader, quicker, surer, smellier, pleasanter and what-not-er and use it to let the people know that our products are of use in killing off certain other household pests, we would be surprised at the results.

The demand for these other uses is, as you know, in the fall, winter and spring. The result would not be in creating this broader demand alone but would tend to keep our products in the minds of the public, in general, the year around. It would not be necessary then to use as much space during the summer months to impress upon the people that products existed that would rid their homes of flies and mosquitoes.

This subject of year 'round sales and advertising effort is not new to us. It has come up time and again. We all have certain theories. Most of us are not convinced. Our principal requisite is COURAGE. We must convince ourselves. Our Canadian Company has proven it. They would not think of suspending their roach, bedbug and moth efforts. What we, ourselves, will do here in the States, I do not know.

Mr. Andree asked me to give you my thoughts on this subject and instead of preparing an address I have merely recorded some of my thoughts and have given them to you. I make no definite recommendations nor predictions. If this humble discourse starts some action along constructive lines toward expanding the market for all of us, then I will feel amply repaid for stepping out of my customary place in the audience to this platform.

*Before Natl. Assn. of Insecticide and Disinfectant Mfrs., Dec., 1932.

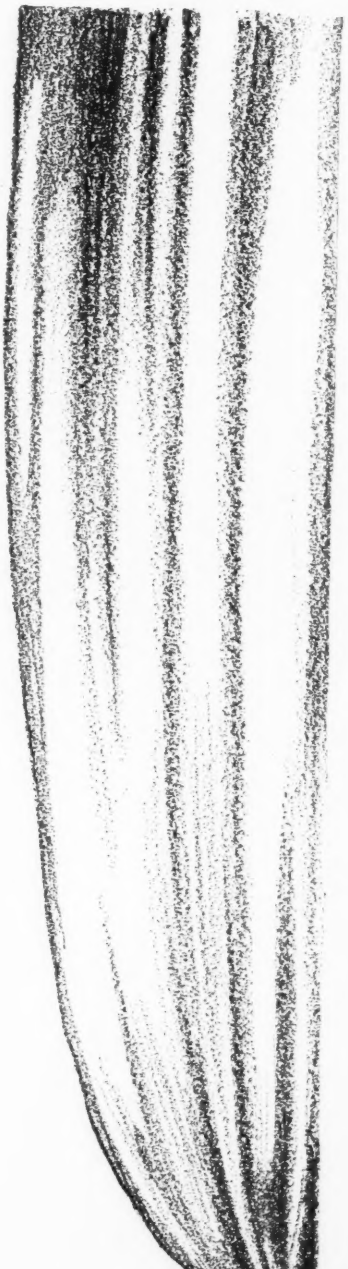
New!

To meet the demands of lower manufacturing costs, our laboratories have worked on a new line of Perfumes for fly sprays and insecticides. We now announce:

MM & R KEROSPRAY BOUQUETS

No. 801
No. 802
No. 803
No. 804
No. 805
No. 806

Complete coverage at minimum cost.—1 ounce to 4 gallons being sufficient. Will impart a delightful bouquet to the finished spray, evaporating at the same ratio as the base. Investigate these NEW Perfumes. Samples on request.



MAGNUS, MABEE & REYNARD, INC.

ESSENTIAL OILS

32 CLIFF STREET NEW YORK, N. Y.

Say you saw it in SOAP!

Safety in Insecticide Use

By Dr. Edward Bocher*

Chief, Drug Inspection, N. Y. City Dept. Health

IT IS scarcely necessary, before a group of insecticide manufacturers, to discuss the economic importance of insect control and its close relative, rodent control. Nevertheless it is this consideration which should be, and too often is not, the foundation of all regulations covering fumigation and extermination. Of equal importance with the economic phase is the question of public health. In fact, these two considerations, should be the basis for all regulation of this rather large and important industry of sanitation service.

Unfortunately, too often the regulations which are made in many cities are the direct result of hysteria caused by some unfortunate accident due almost always to the careless disregard of simple precautions by some irresponsible operator. Such regulations hurt not only the fumigators and exterminators, but also the manufacturers. They curtail the size of the potential market as the public becomes afraid to do themselves, or have done for them, control work which needs to be done.

Only by safe and sane regulation can such evils be avoided. Such regulation involves the licensing of fumigators and exterminators; examination of each man to insure that he understands his business and that he is competent to handle and use the necessary poisonous materials, and the enforcement of proper regulations as to the actual use of these substances.

The city of New York adopted such an ordinance about a year ago and our experience to date has been very gratifying. I can safely say that there has been a distinct improvement in Public Health Safety and also in the quality of the actual work done. It is perhaps true that more thought and consideration were given to the formulation of the New York City Ordinance than to most other Ordinances, of other cities. Nevertheless, certain minor changes and additions may be necessary as will be shown by our experience as time goes on.

I have dwelt at some length on this subject because, in my opinion, perhaps the greatest safety factor in the use of insecticides lies in proper regulation of their use. It is by this means that proper knowledge of the necessary precautions is brought home to the men doing this work. The New York Board of Health has constantly hammered on these points both in examinations of the men and in their enforcement activities. The following is a brief outline of some of the points which have been stressed:

Fumigation: Because of the hazards involved, each fumigation requires a special permit. Not every building can be safely fumigated. If a fumigation can be performed and a permit is issued, the next important matter is to assure low leakage of gas from the building by proper sealing. When the gas is to be applied, the question of proper gas masks at once arises, and we have found it advisable in New York to require that only masks approved by the U. S. Bureau of Mines be permitted. The canisters must be examined to insure that they are of the proper type to protect against the particular gas to be used.

The posting of notices on the premises and the maintenance of guards to see that no one enters is of great importance. When the space has been aired out the utmost care must be taken to see that no pockets of gas remain. Inspection at this point is perhaps the most vital of all, as a large share of the accidents which occur come after this operation, supposedly has been properly performed. Bedding must be aired thoroughly. A mere perfunctory performance of this operation will not do.

You will notice that no mention has been made of any particular gas in connection with these regulations and precautions. This is because in our opinion and experience the same procedure should be followed for all fumigants, as a matter of public safety, irrespective of the type or combinations.

Insecticides: The precautions necessary in the use of the ordinary insecticides such as pyrethrum, fluorides, rotonone and others are so simple as to be self evident. Nevertheless, disregard of them has been the cause of many accidents, and, therefore regulations are necessary. Poisons such as fluorides must not be used in places where foods are prepared and handled. In such places the exterminator must resort to the use of such insecticides as pyrethrum or other non-toxic compounds.

I am reminded of a fact which has a bearing on the desirability, from a safety standpoint, of having extermination work done by professionals rather than by individuals who are not trained. One of the largest public utility companies in the country tries to do its own extermination work and has issued printed instructions to its branches and subsidiaries. In these printed instructions the statement is made that sodium fluoride is non-poisonous and may be used without restriction. If this sort of dangerous misinformation can come from a large corporation with all technical knowledge at its disposal, what can be expected from smaller institutions without advantages of technical staffs?

The coloring of fluorides has greatly reduced the danger of accidental misuse and this principle of protection should perhaps be applied to other poisonous materials. The mere coloring of such substances, however, is not enough in itself. They must still be used with care to insure they do not get into food supplies.

In general, the use of liquid insecticide sprays, does not constitute a health hazard. Pyrethrum is usually the active principle and being non-toxic, there is no danger. Some recent developments in this field are, however, causing the Board of Health some misgivings. When certain newer chemicals, such as some of the halogenated hydrocarbons, the organic formatis, etc., are used as sprays, they become in effect fumigants, particularly if applied in large quantities with power appliances. Here there is real danger to public health. Even though such materials are not sufficiently toxic to cause immediate death, they have a more insidious danger. Most of them may cause edema of the lungs which may later result in pneumonia and possibly death. The widespread individual use of such materials by inexperienced persons cannot be countenanced, but their use by experienced operators may prove to be valuable in the great work of insect control.

Rodent Control: While rodent control does not strictly come under the subject of this paper, it is so closely allied to it that this discussion would be incomplete without mentioning it. Here again, the precautions to be observed in the use of various materials are almost self-evident. Of the poisons customary in rodent control work, arsenic, strychnine, thallium, barium carbonate, and squill, only the last is suitable for use in places where food is prepared and handled, and our regulations are explicit on this point.

In conclusion, let me emphasize again the necessity for you as manufacturers to assist in helping to shape proper legislation and even to initiate such legislation for the protection not only of the public but of your own industry instead of waiting until public hysteria brought on by some unfortunate and preventable accident causes the situation to get beyond control and results in the promulgation of regulations which are both unnecessary from a Public Health standpoint and unwise from the point of view of effective insect control.

*Before Nat'l Assn. of Insecticide and Disinfectant Mfrs., Dec., 1932.

Increase The Sale Of Your Products With Breuer's TORNADO Electric Sprayers

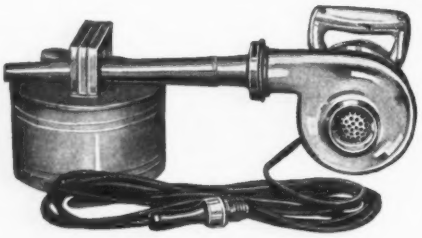
You can increase the sale of your insecticides by supplying your customers with the proper method of application.

TORNADO Electric Sprayers lead the field. Thousands in use. New developments and improvements in design and construction place TORNADO Sprayers far in advance of out-of-date methods, insuring satisfactory application and encouraging the more frequent use of your product.

There is no line so complete or that embodies so many exclusive and modern features of sprayer design and operation. Three models—see illustrations and descriptions below.

Model 53 new Compressor Type unit. Will break insecticide into *finest* mist and gas formation mechanically obtainable. Floats throughout spraying area for many minutes—a truly de luxe model! ⅛ H.P. G.E. Universal Motor. 1 quart metal container. 20′ of rubber covered cable.

Model 50 Fan Type unit. A fine insecticide atomizer. Sprays distance of 8′ to 10′. ⅛ H.P. G.E. Universal Motor, 1 pint glass jar. 20′ of rubber covered cable.



Model 6 Fan Type unit. Will break insecticide into a very fine mist. Sprays 18′ to 20′. ⅓ H.P. G.E. Universal Motor, Norma Ball Bearings, 1 gallon metal container. This model is for larger institutions, warehouses, industrials, etc., and is also highly recommended for moth-proofing solutions.

Write today for complete description and circulars.

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Coal Tar PRODUCTS
Carbon PRODUCTS
Chemicals

CRESYLIC ACID
CRESOL
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XYLENOL
TAR ACID OILS

- - and other Coal Tar Chemicals for the

SOAP and DISINFECTANT INDUSTRY

REILLY
CHEMICAL CO., Inc.
Merchants Bank Bldg.
INDIANAPOLIS

Convention Registration

Included in the list of those who were officially registered at the 19th annual meeting of the National Association of Insecticide & Disinfectant Manufacturers at the Hotel New Yorker, New York, Dec. 12 and 13, were the following:

Peter Dougan	Merck & Co., Inc.
Harry W. Cole	Baird & McGuire, Inc.
D. P. Smith	Dethol Co.
J. H. Lawton	Dethol Co.
G. R. Rinke	John Powell & Co., Inc.
John Powell	John Powell & Co., Inc.
Dr. Alfred Weed	Entomological Testing Labs.
Robert C. Kelley	John Powell & Co., Inc.
Dr. B. G. Philbrick	Skinner & Sherman, Inc.
Dr. R. C. Roark	Bureau of Chemistry & Soils
Dr. E. Avery Richmond	Crop Protection Institute
Frank U. Rapp	Hercules Powder Co.
Evans E. A. Stone	Wm. Peterman, Inc.
Frederick W. Wolff	E. I. DuPont de Nemours & Co.
A. S. Slack	E. I. DuPont de Nemours & Co.
Dr. W. S. Abbott	U. S. Dept. of Agriculture
Frank Hainsworth	Edgar A. Murray Co.
R. S. Rowan	Edgar A. Murray Co.
R. W. Birdsall	Derris, Inc.
R. Wotherspoon	Derris, Inc.
Dr. C. C. Hamilton	Derris, Inc.
Harold Noble	S. B. Penick & Co.
Wallace Thomas	Gulf Refining Co.
H. A. Nelson	Chemical Supply Co.
Dr. Geo. F. Reddish	Lambert Pharmacal Co.
J. L. Brenn	Huntington Laboratories
Fred A. Hoyt	Frederick Disinfectant Co.
Wm. A. Hadfield	General Laboratories, Inc.
P. J. Walsh	Phinotas Chemical Co.
C. C. Baird	Baird & McGuire, Inc.
W. J. Andree	Sinclair Refining Co.
N. J. Gothard	Sinclair Refining Co.
Dr. Emil Klarmann	Lehn & Fink, Inc.
A. L. van Ameringen	van Ameringen-Haebler, Inc.
Philip H. Van Itallie	Topics Pub. Co.
S. S. Selig	The Selig Company
Dr. A. E. Badertscher	McCormick & Co., Inc.
A. M. Russell	American Exterminating Co.
H. M. Clark	Dr. Hess & Clark
James Varley	Baird & McGuire, Inc.
F. J. Pollnow	Vestal Chemical Co.
L. C. Himebaugh	Pepsodent Company
J. C. Bennett	Wilson & Bennett Mfg. Co.
Wm. F. Kroneman	Sherwood Petroleum Co.
Geo. A. McLaughlin	McLaughlin, Gormley, King Co.
S. P. Nickells	S. B. Penick & Co.
J. Rodden	Komo Chemical Co.
C. H. Sterett	Wm. Peterman, Inc.
Chas. P. McCormick	McCormick & Co., Inc.
V. E. Williams	Monsanto Chem. Wks.
J. A. Walsh	C. B. Dolge Co.
F. C. Nelson	Stanco, Inc.
W. H. Wales	Rex Research, Inc.
E. B. Loveland	Soule, Feeley & Richmond
H. W. Hamilton	White Tar Co., of N. J.
J. H. Carpenter	Koppers Products Co.
Dr. J. H. Wright	Zonite Products Co.
Frank E. Byrne	Monsanto Chemical Works
W. J. Zick	Stanco, Inc.
A. A. Breuer	Breuer Electric Mfg. Co.
Arthur Srebren	Murray & Nickell Mfg. Co.
Ira P. MacNair	MacNair-Dorland Co.
Grant A. Dorland	MacNair-Dorland Co.
Wayne Dorland	MacNair-Dorland Co.
J. N. Davies	Henry Barroll & Co., Inc.
J. B. Magnus	Magnus, Mabee & Reynard, Inc.
Dr. Robert C. White	Robert C. White Co.
R. H. Young	Davies-Young Soap Co.
R. H. King	Crude Drug Importers, Inc.
Dr. Thomas Lewis	S. B. Penick & Co.
A. Schmitthenner	Rose Rat Exterminator Co.
Dr. Wm. Dreyfus	West Disinfecting Co.
W. L. Savell	Mathieson Alkali Works
C. L. Weston	Givaudan-Delawanna, Inc.
M. D. Leonard	United Chem. & Ext. Co.
L. M. Blickman	Metal Package Corpn.
L. J. LaCava	Continental Can Co.
D. P. Lewis	H. D. Hudson Mfg. Co.
N. L. Fremed	Sameth Exterminating Co.
Eliott Odell	Drug Trade News
P. L. Hayden	White Tar Co.
S. B. Penick	S. B. Penick & Co.
James Scott	Department of Commerce
W. C. Stolk	American Can Co.
W. H. Schumann	American Can Co.
A. P. Pellett	E. I. DuPont de Nemours & Co.
V. A. Snell	Lowell Sprayer Co.
H. F. Croen	van Ameringen-Haebler, Inc.
William Haebler	van Ameringen-Haebler, Inc.
Philip P. Gray	Pease Laboratories, Inc.
Dr. B. T. Woodward	H. Clay Glover, Inc.
M. S. Barker	Magnus, Mabee & Reynard, Inc.
J. L. Tildsley, Jr.	Int. Comb. Tar & Chem. Co.
Wm. Higburg	Int. Comb. Tar & Chem. Co.
P. C. Reilly, Jr.	Int. Comb. Tar & Chem. Co.
W. G. Hirschfeld	Int. Comb. Tar & Chem. Co.
R. C. Quortrup	The Barrett Company
H. Midtskang	McLaughlin, Gormley, King Co.
M. Lemmermeyer	Givaudan-Delawanna, Inc.
G. M. Warren	Givaudan-Delawanna, Inc.
F. Sinclair	Drug & Cosmetic Industry
Tom Farrell	Drug & Cosmetic Industry
T. Frascati	Guest of Drug & Cos. Ind.
O. V. Spedden	Continental Can Co.
Montefiore Selig	The Selig Co.
Richard Bradley	White Cap Co.
Dr. L. L. Isenhour	Rohm & Haas Co.
J. K. Stewart	Anderson-Pritchard Oil Corp.
H. L. Davis	D. H. Litter Co.
Dudley Bachrach	Clifton Chemical Co.
Dr. Chas. H. Peet	Rohm & Haas Co.
M. S. Galler	Reefer-Galler, Inc.
Leonard B. Schwarcz	Clifton Chemical Co.
M. J. Fessler	Warner Brothers
W. Auerbach	West Disinfecting Co.
I. L. Ressler	E. I. DuPont de Nemours & Co.
E. P. Nicholson	Givaudan-Delawanna, Inc.
H. W. Leinbach	Merck & Co., Inc.
Dr. Erich Meyer	L. Sonneborn Sons, Inc.
O. G. Jakob	Continental Can Co.
John C. Wolke	L. Sonneborn Sons Co.
Dr. Edward Bocker	N. Y. City Board of Health
Smith L. Rairdon	Owens-Illinois Glass Co.
F. Sameth	Sameth Co.
I. H. Josephson	Josephson Dis. Co.
O. L. Williams	Williams Sealing Corpn.
J. A. Cavanaugh	Dow Chemical Co.
C. M. Cook	S. B. Penick & Co.
D. C. Beach	S. B. Penick & Co.
F. E. Bohman	Birchard System, Inc.
R. Manville	Shell Petroleum Co.
Chas. F. Opitz	John Opitz, Inc.
W. Schlosser	John Opitz, Inc.
J. H. A. Fink	John Powell & Co., Inc.
H. Leinbach	Merck & Co., Inc.
A. B. Avery	Williams Sealing Corpn.
N. Olsen	Aluminum Co., of America
D. Tilson	Aluminum Co., of America
Eugene Kohn	Chemical Compounding Co.
C. L. Weirich	C. B. Dolge Co.
C. L. Iorns	John Powell & Co., Inc.
P. Muller	Owens-Illinois Glass Co.
Dr. H. D. Pease	Pease Laboratories, Inc.
E. Patrick Meyers	E. P. Meyers Co.
B. H. Westcott	S. B. Penick & Co.
Dr. Louis M. Roeg	Merck & Co., Inc.
Robert L. Wilson	Dow Chemical Co.

(*Turn to Page* 103)

It will be easier to sell Quality Products in 1933!

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Why? — because users have found out that it is poor economy to buy on price only.

You cannot go wrong when you sell Chemical Supply Products. They are QUALITY PLUS and the line is complete with disinfectants, insecticides, and a host of other Sanitary Specialties.

Write for Complete List and Prices.

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How We Measure

PYRETHRUM CONCENTRATE No. 15

Not just fifteen pounds of flowers to the gallon	**but**	A minimum of fifteen pounds because Pyrethrum flowers depreciate
Not just chemically tested for Pyrethrin content	**but**	Biologically tested by Peet-Grady method for percentage of kill
Not made by the "hot" process	**but**	By the cold process to be sure the active principle is not affected
Not sold at any old price	**but**	The price is standard too, containing a fair margin of profit to us

This is proper standardization — is it so complicated?

Pyrethrum Powder — Pyrethrum Concentrate No. 15 — 14-1 dilution

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Say you saw it in SOAP!

Rotenone Effectiveness and Stability

Tests were made to determine the effectiveness of rotenone as an internal poison and contact material. As a contact insecticide, rotenone in small quantities is highly toxic to a number of insects, such as plum curculio, Oriental fruit moth, boxwood leaf miner, etc., but it is not so effective when applied to insect eggs. Rotenone is highly effective as a stomach poison. At the rate of one part in 1000, it killed 80 per cent of the larvæ of the Colorado potato beetle within two days. This percentage was killed within one day by arsenate of lead at the rate of 1.5 pounds in 100 gallons. Rotenone in as small concentration as one part in 12500 parts of spray killed a large percentage of Colorado potato beetle larvæ, but acted very slowly. Good results were also obtained on the cabbage maggot. Rotenone deteriorates quickly in the presence of soap and water, whether contained in the soap or incorporated in oil which is emulsified with soap. Rotenone is apparently stable when it is dissolved directly in oil-soluble sulfonate. Rotenone in oil is apparently stable when emulsified with powdered skimmed milk. Neely Turner, *Journal of Economic Entomology*, volume 25, 1932, pages 1228 to 1236.

—o—

Reilly Tar & Chemical Corp. is now the corporate name of the International Combustion Tar & Chemical Corp., according to an announcement from the latter firm. The change was effective Jan. 6 last. The company has offices in Indianapolis, Chicago, and New York, and plants at Newark, N. J., Chicago, Chattanooga, Dover, Ohio, Granite City, Ill., and Fairmount, W. Va.

—o—

Mosquito extermination work has given employment to a total of 2,700 men in the Cape Cod area of Massachusetts, according to Edward Wright, chairman of the State Reclamation Board.

—o—

The advertising campaign for the new antiseptic of Vick Chemical Co. is in the hands of Young & Rubicam, Inc. Large space in a selected list of newspapers is being used to introduce the product.

Guinea Pigs?

Another sensational book of the "expose" type has descended upon us under the title, "100,000,000 Guinea Pigs" by F. J. Schlink and Arthur Kallet, both associated with Consumers' Research, Inc., New York. The book names names and condemns products in a wholesale fashion. It classifies the Food and Drug Laws as more or less useless, and their enforcement by the Administration as weak. Drugs, disinfectants, and antiseptics come in for their share of condemnation. It draws a horrible picture of a nation poisoned by dangerous food preservatives and drugs, and thousands dying because they have placed their faith in antiseptics which do not kill bacteria.

Although there is undoubtedly a strong element of truth in much which Messrs. Schlink and Kallet have to say, the sensational character of the presentation, coupled with too many unwarranted conclusions, weakens any case they may have. The book has been written for the public and others who believe because they see it in print. The authors reveal that they are not technical men, and their technical guidance has been poor. There is too much which is far-fetched. In their condemnation of certain types of "modern" advertising, they are at their best and their darts strike home. Any intimation or charge that the Food and Drug Administration and other enforcement officers willfully turn their backs on violations of the law, we believe after watching enforcement for nearly twenty years, is unfair and unwarranted. The book is well-worth reading by any interested manufacturer. Published by The Vanguard Press, New York.—Ed.

—o—

Exports of household disinfectants, deodorants, germicides, etc., from United States during November, 1932, amounted to 110,599 lbs., valued at $19,591, as compared with 118,056 lbs., worth $14,136, in the same month of 1931.

—o—

Imports of pyrethrum flowers into United States during November, 1932, totaled 1,644,523 lbs. worth $164,328, as compared with 552,087 lbs., valued at $65,012, during the same month of 1931.

THE FRUITS OF RESEARCH ARE STILL BETTER PRODUCTS
AND THEREFORE INCREASED SALES.

Foster D. Snell, Inc.
Chemists « Engineers
130 Clinton St.,
Brooklyn, N. Y.

Say you saw it in SOAP!

KOPPERS

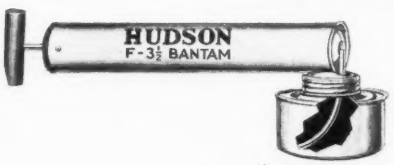
TAR ACIDS
CRESOL U.S.P
CRESYLIC ACID
98% to 100% STRAW COLOR
TAR ACID OILS
PHENOLS
NEUTRAL
HYDROCARBON OIL

KOPPERS PRODUCTS COMPANY
1249 KOPPERS BUILDING
PITTSBURGH, PA.

HUDSON SPRAYERS

ALWAYS FIRST
WITH THE LATEST NEWS
and here IS news!

GLASS TANK



METAL TANK

TANKS ARE INTERCHANGEABLE

Here is flexibility. One pump fits both tanks, making it possible for you to offer either a glass or metal tank—and with an investment in extra tanks ONLY.

FILLER OPENING THREE TIMES BIGGER

On these New Sprayers the filler opening is three times larger than ordinary. It's easy now to pour in the liquid without spilling or slopping.

HANDLE AND PLUG ARE MODERN IN DESIGN

In keeping with the many other refinements found on these new sprayers, the handle and plug have been redesigned. They add the finishing touch to a quality piece of merchandise.

Write for Samples Today!

H. D. HUDSON MANUFACTURING CO.
589 E. ILLINOIS ST. CHICAGO, ILL.

New York City Minneapolis, Minn. Omaha
San Francisco Philadelphia Kansas City, Mo.

Say you saw it in SOAP!

Pyrethrum Extracts

Emphasis is laid on the use of suspensions of pyrethrum in water as insecticides. The pulverized flowers (1.5 parts by weight) are used with 100 parts by weight and 1.5 to two parts by weight of soft soap. Soap-pyrethrum extracts may be purchased and diluted directly with water, or extracts of pyrethrum in organic solvents may be likewise diluted with water. Other preparations contain the extract in the presence of soap and high boiling organic solvents or emulsifiers, which leave an emulsion on evaporation.

Lack of data in the literature on the proportion of extract obtained from dried pyrethrum flowers, led to experiments on Dalmatian pyrethrum with various solvents to determine their extracting power. The flowers were extracted in a Soxhlet, the solvent was distilled off and flasks were weighed after being dried in a dessicator. The solvents chosen may be grouped as follows: alcohols and ethers, esters, chlorinated hydrocarbons, aliphatic hydrocarbons, and aromatic hydrocarbons.

No solvent boiling at more than 100 degrees C, was used, because a part of the active substance in the extract is lost when the latter is raised to a higher temperature than 100 degrees C in driving off the solvent.

The results obtained by cooking the flowers with the solvents are about half to one per cent higher than the values given below for the extracts.

Solvent	Percentage Extracted
Acetone	10.04
Denatured alcohol	20.55
Ether	4.29
Petroleum ether	4.91
Benzene	8.45
Ethyl acetate	8.31
Carbon tetrachloride	5.09
Trichloroethylene	11.90
Chloroform	7.86
Methanol	22.71

The values are the average of two determinations in each case. Extraction was prolonged until the extracting solvent was distinctly green. The solvent should not be completely evaporated in practical work. The quantity of extract obtainable from a charge of flowers should be previously determined on a small sample. The pyrethrin content should also be determined in this test. Then in the large scale extraction, the extract is distilled until approximately two-thirds of the solvent has been removed. The residue, that is, extract plus one-third of the solvent, is reused. It is however preferable to evaporate off the solvent at as low temperature as possible under a vacuum. Richard Neu, *Der Chemisch-technische Fabrikant*, 1932, volume 29, pages 790-1.

—o—

Dr. J. Mitchell Fain, consulting chemist, is now associated with Foster D. Snell, Inc., Brooklyn.

The Answer

"What shall we do about packaging?" If you are asking this question, we can help you find the answer. Perhaps it is the bottle illustrated above . . . the Imperial Oblong. Or it may be in hundreds of other *Onlzed* glass containers. *Onlzed* packaging service includes inner and outer cartons and label design, as well as providing you with a glass container exactly suited to your product. Owens-Illinois Glass Company, Toledo, Ohio

Onlzed CONTAINERS

Owens-Illinois

1873 • SIXTIETH ANNIVERSARY • 1933

VOGEL

A substantially constructed sprayer that will stand up under hard usage, priced at a remarkably low figure.

SPRAYERS

Regular hand type, also continuous. Sturdy, well designed. The greatest value for your money in sprayers.

CANS

Standard stock sizes for liquid insecticides and disinfectants. Plain or lithographed. A gross or a carload. The standard insecticide container.

Deodorizing Block Holders
Shaker Top Cans for Para

Plain stock types or specially lithographed

WILLIAM VOGEL & BROS., Inc.
37-47 South 9th St. Brooklyn, N. Y.

TRADE B MARK

CRESYLIC ACIDS

CRESOLS

TAR ACID OILS

COAL-TAR SOLVENTS

TRADE B MARK

Barrett Standard

CHEMICALS

The Barrett Company maintains a staff of competent technical experts who offer their cooperation in the development of chemicals particularly suited to individual needs. They will welcome the opportunity to discuss your production problem with you. 'Phone, wire or write.

The Barrett Company

40 Rector Street, New York, N. Y.

Say you saw it in SOAP!

M-G-K Changes Sales Organization

All products of McLaughlin Gormley King Co., Minneapolis, will henceforth be handled by one instead of two groups of salesmen, as the result of a recent change made in the sales organization of that company. This move, it was explained, does away with the former practice of having one group of salesmen handle only the company's trade-marked items, such as Ever-Green and Selocide; and another group handle concentrated extract of pyrethrum, crude drugs, disinfectants, etc. Under the new plan, a district sales representative will be in control of all M-G-K products.

The following district sales representatives have been appointed: J. V. Miller in charge of eastern territory including eastern seaboard states; Jay Murray in charge of middlewestern lake states and southern sales district; Frank J. Radeck in charge of trans-Mississippi states sales district from Iowa south and as far west as Denver. Two local sales districts will be created in the northwestern states of Minnesota, North and South Dakota, Wisconsin, etc. A. W. Bevernick will be in charge of one, and C. L. Drake of the other. R. W. Coulter and his assistant, C. F. Ladeburg will be in charge of the Pacific Coast states sales district, including the Pacific States natural territory.

—o—

A mixture of ethylene oxide and carbon dioxide, used as a fumigant in a vacuum chamber, was found by Dr. A. O. Beckman of the California Institute of Technology to be the most effective material against book worm infestations in California libraries.

—o—

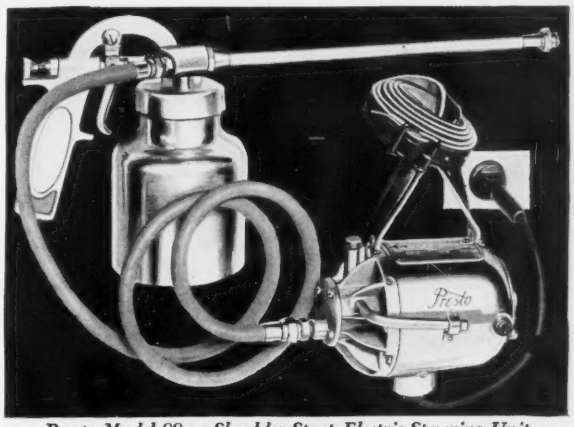
Smith, Kline & French, Inc., Philadelphia, have purchased the business of the Miller Drug Co., Philadelphia.

—o—

Convention Registrations

(*From Page 97*)

Alexander Leith	Dow Chemical Co.
A. U. Underhill	The Tanglefoot Co.
James L. Meehan	The Tanglefoot Co.
C. F. Booth	Fritzsche Brothers, Inc.
Alexander McCurdy	Oil, Paint & Drug Reporter
N. K. Concannon	Guaranteed Sanitation, Inc.
A. V. Crary	Continental Can Co.
S. B. Penick, Jr.	S. B. Penick & Co.
B. H. Wescott	S. B. Penick & Co.
R. C. Watson	Ungerer & Co.
E. R. Vetterlein	P. R. Dreyer & Co.
A. B. Avery	Williams Sealing Corpn.
R. B. Magnus	Magnus, Mabee & Reynard, Inc.
G. H. McGlynn	Magnus, Mabee & Reynard, Inc.
E. B. Houghton	Magnus, Mabee & Reynard, Inc.
John Abbott	Merck & Co., Inc.
William Mason	Koppers Products Co.
Ralph Gretsch	White Tar Co.
E. W. Van der Wolk	White Tar Co.
L. H. Wright	White Tar Co.
George Perrch	White Tar Co.
C. S. Hughes	Huntington Laboratories
H. T. Lowmaster	Chesapeake & Ohio Railway
R. E. Dorland	Dow Chemical Co.
L. W. Miller	The Barrett Co.
Walter Buehler	The Barrett Co.
A. Williams	Arridor Company
F. E. Byrne	Monsanto Chem. Wks.



Presto Model 88-94 Shoulder Strap Electric Spraying Unit

New- Presto *Model 88-94 Shoulder Strap* Electric Spraying Unit

The powerful, effective spraying unit for all Insecticides—Disinfectants—Moth Killers—Deodorants

THIS new Presto Electric Spraying Unit is especially designed for the larger users—hospitals, industrial plants, dairies, poultry farms, packing plants, and similar places where quick, effective spraying is a necessity.

Two unit design includes *rotary compressor* of ample capacity carried on a shoulder strap—relieving the operator's hands of excessive weight. The Presto spray gun has a 12-inch extension nozzle, giving added reach and making inaccessible corners easy to cover. Convenient adjustment varies the spray instantly from heavy wet spray to a finely atomized mist that will float in the air. Any operating condition can be met, conveniently and economically.

Presto spraying equipment increases the sale of liquid disinfectants and insecticides of all kinds. Thousands of the famous Presto Model 102 spray guns are in use. Try a Presto spraying unit. You will find them far ahead of the ordinary types previously available. Recommend or furnish Presto equipment to your customers and earn an extra profit on increased sales of materials. The Presto plan is a proved business getter. Send the coupon now and get full information.

Presto Model 102 Spray Gun

METAL SPECIALTIES MFG. CO.
3200 Carroll Ave., at Kedzie Ave., Chicago, Ill.

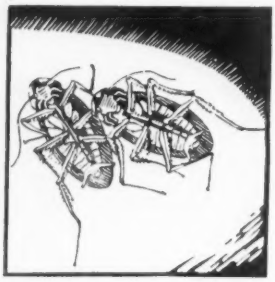
Send full details of Presto Insecticide spray gun features and sales plans. We are interested in ☐ 88-94 large guns. ☐ 102 small guns.

*Name*_____

*Address*_____

*City*_____ *State*_____

Say you saw it in SOAP!



The Effective Insecticide

Quick — Positive — Safe

The average user of insecticides demands two things —quick action and certain death. Insect annoyance must be stopped promptly and permanently.

LETHANE 384

acts with surprising speed and with absolute certainty. It will pay you to use Lethane 384 as the active component of your insecticide.

Röhm & Haas Co., Inc.

222 West Washington Square

Philadelphia Pennsylvania

CIN-MADE CONTAINERS

Makers of all kinds of insecticides, cleansers, soap powders, deodorants, paradichlorbenzine blocks and crystals, and many other similar products use CIN-MADE cylindrical fibre containers. From a wide variety of styles, sizes and colors there is a CIN-MADE container to meet your individual requirement. A large stock of all standard sizes is always carried in stock enabling us to offer 24 hours' service on rush orders. Prompt service on special sizes.

A FEW CIN-MADE STARS

1. Single holders for para blocks. **2.** Special single holder with diamond cut holes and duo finish. **3.** Multi-type container for para blocks. **4.** Revolving nickeloid sifter cover. **5.** Aluminum pour-out spout type. **6.** Non-neck style—semi-perforated screw cap. **7.** Tin slip-on cover—semi-perforated. Samples and prices on request

THE CIN-MADE CORPORATION FORMERLY THE CINCINNATI MAILING DEVICE CO.
294 EGGLESTON AVENUE CINCINNATI, OHIO

Say you saw it in SOAP!

Found 17 Bacteria Types in Bedbug

Mr. A. Moore Hogarth, President of British College of Pestology, commenting upon the danger of dumping burnable refuse outside of various town areas writes:—"Recently I made a bacteriological culture of the digestive and excretory organs of an ordinary bedbug (one of the common types of insects found in burnable refuse dumps), and the result yielded some 17 types of bacteria all capable of being inoculated, and by the bedbug itself, into the blood stream of its host."

—o—

Toxicity of Rotenone and Pyrethrin

Solutions of the pyrethrins and rotenone in mineral oil were prepared and their toxicity to flies (*musca domestica*) was determined by the Peet-Grady method. Highly refined Pennsylvania oil, giving a kill of less than six per cent by standard test, was used. Five per cent of acetone was added to the solutions due to the low solubility of rotenone in this oil. The pyrethrin and rotenone content of the solutions was so adjusted that a fifty per cent kill was obtained by the Peet-Grady test. It was found that the pyrethrin solution gave a much higher knockdown and a considerably greater kill than the rotenone solution of the same strength. Replacement of half the pyrethrin content by rotenone lowered both knockdown and kill. Two solutions, containing 63.4 mgm. per 100 cc. of pyrethrin and in addition one-third and one-sixth as much rotenone respectively were tested. The first was found to be slightly more toxic than the second and the second was slightly more toxic than a solution of pyrethrin containing 63.4 mgm. per 100 cc. Thus the addition of rotenone to solutions of pyrethrin increases the toxicity of the latter to some extent. C. B. Gnadinger and C. S. Corl. *Journal of Economic Entomology*, 1932, volume 25, pages 1237 to 1239.

—o—

The new fumigation committee of the Manufacturing Chemists' Association is composed of the following:

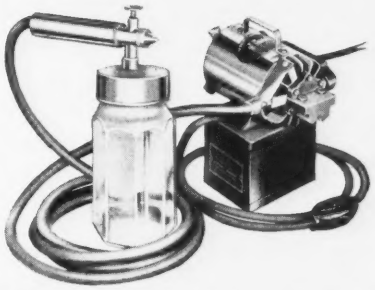
I. L. Ressler, du Pont de Nemours & Co., chairman; W. S. Gavan, American Cyanamid; H. Sydney Smith, Union Carbide; A. K. Scribner, Virginia Smelting, and A. W. Putnam, Dow Chemical.

—o—

Ohio Carbon Co., Cleveland, is introducing a new deodorant under the name "Cleanaire" for eliminating offensive food odors in refrigerators. The deodorant used is activated carbon, packed in a cellophane-wrapped display carton.

Additional addresses made before the recent 19th Annual Meeting of the National Association of Insecticide & Disinfectant Manufacturers in New York will be published in the March issue of *Soap*.—Ed. Note.

For Faster, Cheaper Better Spraying



SPRAYIT Model 70

Easy to carry, easy to operate, Sprayit Model 70 applies insecticides, disinfectants and deodorants rapidly, economically and efficiently.

Sprayit Model 70 is a positive pressure type unit and is not to be confused with the older and less efficient blower fan type sprayers. Positive pressure means finer atomization of materials, more rapid application, higher efficiency and general satisfaction. Only the gun is held in the hand, relieving the operator of any strain on arms or fingers. The compressor is carried over the shoulders by means of a comfortable strap or placed on the floor as desired.

Thousands upon thousands of Electric Sprayits are in use throughout the world. Furnish these standard Electric Sprayers to your larger customers and assure yourself that your product will have every opportunity to make good.

Send for Bulletin on Model 70 and other models.

Complete Line of HAND SPRAYERS

Sprayit also offers a complete line of hand sprayers ranging from small tin sprayers that retail at a few cents each to continuous sprayers, compressed air sprayers and other types used for the application of floor oil, etc.

Send for No. 32 catalog.

This is the Sprayit Peerless Sprayer of three (3) quart capacity. A convenient, low priced sprayer for use when high pressure and automatic control are desirable.

SPRAYIT—South Bend, Ind.

SPECIALTY SOAPS

LIQUID SOAP BASE

Coco Oil—60%—Natural, Opal, Green

LIQUID SOAPS

Coconut ..... 10% to 45%
Olive Oil .... 10% to 30%
Colored and Perfumed

SCRUBBING SOAPS

Pine, Sassafrass, Plain

LIQUID SHAMPOOS

Coconut Oil .. 30% to 45%
Olive Oil 30%
Castile 30%

POWDERED and GRANULATED SOAPS

Castile, U. S. P.
Coco Castile 50-50
Pure Coconut

SOFT POTASH SOAPS

Light and Dark
U. S. P. 9th and 10th

PHONE CUMBERLAND 6-2800
KRANICH SOAP CO.
54-60 RICHARDS ST. BROOKLYN, N.Y.

HOOKER 'PARADI'

(Reg. U. S. Pat. Off.)

Hooker Paradichlorbenzene is specially prepared for use in the manufacture of moth preventives and deodorants and is offered in six standard crystal sizes.

Ready for immediate shipment in 200 and 100 pound barrels and 50 and 25 pound kegs.

HOOKER CHEMICALS

Liquid Chlorine
Caustic Soda
Aluminum Chloride
Bleaching Powder
Ferric Chloride
Ferrous Chloride
Muriatic Acid
Sulphur Monochloride
Sulphur Dichloride
Acetyl Chloride
Benzal Chloride
Benzo Trichloride
Benzoate of Soda
Benzoic Acid
Benzoyl Chloride
Benzyl Chloride
Monochlorbenzene
Propionyl Chloride
Paradichlorbenzene
Para Nitrobenzoyl Chloride
Alpha Chlornapthalene
Benzyl Alcohol
Salt
Orthodichlorbenzene
Trichlorbenzene
Sulphuryl Chloride
Thionyl Chloride
Ammonium Benzoate
Antimony Trichloride
Arsenic Trichloride
Hexachlorbenzene
Monochlor Toluene
Tetrachlorbenzene

HOOKER ELECTROCHEMICAL CO.

HOOKER ELECTROCHEMICAL COMPANY

Eastern
Plant—Niagara Falls, N. Y.
Sales Office—60 E. 42nd St., New York

Western
Plant—Tacoma, Washington
Sales Office—Tacoma, Washington

1527

Say you saw it in SOAP!

Permit Moth-Gas Registration

"Moth-Gas" has been ruled proper as a trade mark to be registered by The Lewy Chemical Company of New York City, for its insecticide. Denied registration by the examiner in the United States Patent Office, the company appealed to the office of the commissioner of patents, where the claim of registrability was upheld. The mark to be used consists of a representation of a lozenge in doughnut form above which is the notation "Moth Gas" together with the representation of a gas emanating from the lozenge.

In ruling for the applicant, First Assistant Commissioner Kinnan said:—"It is thought that the mark when viewed as a whole, although highly suggestive, is not merely descriptive. The goods are not associated with nor do they give off any such smoke as is illustrated in the mark; and the words used as they are, partly obscured by gas fumes, give the mark a degree of fancifulness which it is deemed justifies the registration. The term 'Moth Gas' is not shown to have been previously used by others to designate any kind of a gas for killing moths, and it is even uncertain whether the applicant's goods held a gas at all. In view of these facts it is thought that if the applicant disclaims the representation of the goods the mark should be registered."

—o—

Warns of Spurious Rat Serum

Pasteur Vaccine Laboratories of France have issued a statement from their New York office, stating that a spurious rat serum is being offered under the name and trade mark of Pastoxine, the Pasteur product. The announcement states in part:

"We have been amazed to find out recently that a spurious product is being offered to the trade, illegally under our name and registered Trade-mark Pastoxine. We have traced the source of supply to Chicago; violators of our rights being namely, Universal Trading Company, or so-called Pastoxine Distributors, using this name without authority by us, thus deceiving the trade. These people cannot supply genuine Pastoxine.

"Therefore we respectfully request you to note the following: 1. The so-called Pastoxine Distributors or sales companies, are completely eliminated, beginning from this date, Pastoxine will be distributed to bona-fide jobbers exclusively from our New York office. 2. Our *new* style packages are ready for distribution from New York."

—o—

According to a twelve-month study of moth habits and the sale of anti-moth preparations in large cities by Lawrence Piller of the Elkay Products Corp., New York, moths breed and cause equal damage in steam-heated apartments, homes, lofts and factories during the winter months as in summer. The opinion that they lie dormant during the winter is erroneous and they do just as much damage to woolens, furs and other materials as in warm weather, he states.

DEODORIZING BLOCKS AND MATERIALS

Regular or Private Brand for Deodorizing and Moth Prevention Compressed Balls or Blocks

All Kinds of

NAPHTHALENE

Plain or Perfumed

PARADICHLOROBENZENE

Plain or Perfumed

Made with the most modern machinery

Send inquiries to

THE WHITE TAR COMPANY

BELLEVILLE PIKE - KEARNY • N.J.

KOPPERS

Say you saw it in SOAP!

"SERRID" PRODUCTS of DERRIS ROOT

A complete range of Derris products uniform as to qualities, standardized as to Rotenone content, and sold on this basis. Available in large quantities to manufacturers of insecticides.

Powdered Root, standardized, is most effective in household powders. For protection of vegetable and fruit crops, powdered Derris Root is not only efficacious but leaves no poisonous residue.

For Fly Sprays
"SERRID" DOUBLE X

A combination Rotenone pyrethrum oil concentrate that will stay in solution,—a decided improvement in the field. Sold on a kill basis as high as 85%. With this base manufacturers may improve their product and lower their costs.

For Agricultural Sprays
"SERRID" SUPERSPRAY

A finished concentrated liquid plant spray sold in bulk for repackaging. Highly effective against mealy bug and red spider. Tested and proven by prominent entomologists.

DERRIS, INC.
79 WALL STREET NEW YORK, N. Y.

Death to
Rats .. Mice .. Ants
THALLIUM SULFATE
kills!

Manufacturers of insecticides should investigate the possibilities of using this product in their preparations.

Exterminators will find Thallium Sulfate an especially efficient product when used on baits in accordance with our directions.

Thallium Sulfate is a white powder —100% tasteless and odorless. Other thallium salts are also available. Packed in 2½ pound bottles and cans and in 50 pound boxes. Get complete information about the merits of Thallium Sulfate now.

ORE & CHEMICAL CORP.
40 RECTOR ST. NEW YORK, N. Y.
BOwling Green 9—5523-24-25

New!
REPELOCIDE
for 1933 Sprays

. . . a genuine repellent for use in
. . . household, cattle and other insecticidal sprays.

Repellent Value—Livestock Sprays
94% efficient *with 10%* REPELOCIDE
76% efficient *without* REPELOCIDE

Repellent Value—Household Sprays
69% efficient *with 5%* REPELOCIDE
45% efficient *without* REPELOCIDE

. . . will increase the kill of your Pyrethrum sprays 15 to 25% by the Peet-Grady method.
. . . will not stain in household sprays.
. . . pleasant odor, making other perfuming unnecessary unless desired.
. . . also for use in insect repellent creams, flea and chigger ointments.

Let us send you full detailed information.
Trial gallon $2.50 F. O. B. St. Louis.

THOROCIDE COMPANY
619 Clark Avenue St. Louis, Mo.

Say you saw it in SOAP!

CLASSIFIED ADVERTISING

Classified Advertising—All classified advertisements will be charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap*, 136 Liberty St., New York.

Note: All advertisements must be in publisher's hands by the first of the month for that month's issue.

Positions Wanted

Soap Maker and Chemist, with long years' experience over here and abroad—reliable in every respect and familiar with the manufacture of all kinds of soaps from A to Z. Best references. Address Box 164, care *Soap.*

A master soap maker, 52 years experience all kinds of potash and soda soaps, also face and shaving creams, toilet and shampoo soaps, will send formulas with detail instructions and short cuts easy and practical at a reasonable price. References supplied. Address Box 155, care *Soap.*

I am a first class practical soap maker with many years experience in Europe and the United States, looking for a position. I am expert in laundry, boiled and semi-boiled soap, also oil soap in different percentage; soap base with or without glycerine, transparent soap, blue mottled soap, liquid soap in different percentage, shaving soap, soap powder in different process, scouring soap and powder, etc. Write to J. Wolf, 2616 W. Kilbourn St., Milwaukee, Wisc.

Supt. Soap Maker, Perfumer—Laundry, toilet soaps, preparations. Long experience on profit-making goods. Hablo castellano. Remodel factories. Address Box 162, care *Soap.*

Soap and Wax Maker—Man with 14 years experience in toilet, paste, soft and liquid soaps, disinfectants, floor waxes, including self-polishing. Analytical control. Intensive worker, can manage complete production. Seeks position of greater responsibility. Address Box 163, care *Soap.*

Soap Plant Manager—Man with many years' experience in complete charge of soap business, manufacture, sale, purchasing, seeks new position. Box 151, care *Soap.*

"HOLZ-EM"
Wax Applicator and Spreader

Makes it easy and convenient to apply and spread all types of floor dressings QUICKLY and EVENLY to all types of floors.

SIMPLE
PRACTICAL
DURABLE
INEXPENSIVE

The sheep wool pads are all first quality skins, specially tanned, with wool clipped to uniform length, insuring uniform application and spreading.
Sheep wool pads are washable and replaceable.
Made in three convenient sizes.
Packed one complete set with long handle in individual carton.
Recommended and sold by leading manufacturers and distributors of floor dressings throughout the country. Write for descriptive literature and prices.

American Standard Mfg. Co.
2509-13 LIME STREET CHICAGO, ILLINOIS

Manufacturers also of:
HOLZ-EM HANDLES
KREBS RAINBOW MOPS } the patented "leave-no-lint"
KREBS MASTERMOPS } mops made of BRAIDED YARN
KREBS CAMELIZED SPONGES

Write for details

PHOSPHORUS PASTE
Insecticide
and
Rodent Killer

Phosphorus Paste for Pests kills roaches and rats.
A standardized product that is exceptionally smooth and consistently uniform.
Manufactured from the most select raw materials and unconditionally guaranteed.
Millions of cans and tubes of rat and roach paste containing phosphorus are sold annually. Pack our Paste in tubes or cans for profit.
Sold in fifty pound steel pails.

POISON GRAINS
Effective and economical exterminators of mice.

Poison Rye (colored green)
Poison Oats (colored blue)
Poison Wheat (colored red)
Poison Barley (colored purple)
Poison Canary (natural color)
Mixed Poison Grains (colored four seed mixture)
Packed in fifty and one hundred pound drums.

We manufacture bulk products for the trade *only.*

SENNEWALD DRUG COMPANY, Inc.
800 Hickory Street Saint Louis, Missouri
Established 1855

Know What You Are Buying

As a buyer or consumer of liquid insecticides you must have some medium for ascertaining the efficiency of the products you purchase and sell.

Why guess or be in doubt? You have at your disposal a medium for purchasing insecticides on an intelligent basis.

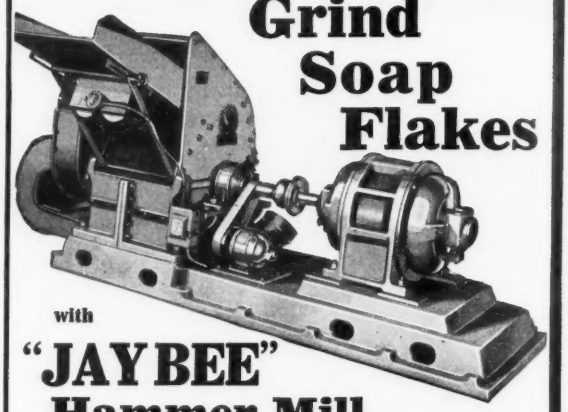
Entomological testing by the Peet-Grady method, and chemical examination of insecticides are now available.

Charges are moderate, and our completely equipped and expertly directed laboratory is at your service.

ENTOMOLOGICAL TESTING LABORATORIES, INC.

114 E. 32nd St. New York, N. Y.

Grind Soap Flakes



with

"JAY BEE" Hammer Mill

Economy—fineness and uniformity of product made by "JAY BEE" all steel hammer mill are not equaled by any other grinding or reducing process. Soap manufacturers—investigate the World's Greatest Grinder—the "JAY BEE"—for a better product, at less cost.

Roots — Herbs — Spices — Drugs

The "JAY BEE" grinds every kind of herb, root, drug or spice grown. Where small quantities of any products are to be ground, and when cleaning the mill between each grind is a factor in economy, the "Jay Bee" junior and midget mills, with 2 H. P. to 12 H. P., cannot be equaled. Ideal mills for grinding Insecticides.

"JAY BEE" mills are compact: require small space. Sturdy steel construction. Long life, biggest capacity for H. P. used. Low operating and upkeep cost. Sizes and styles to meet every grinding requirement: 2 H. P. to 100 H. P. with belt, V-belt, and direct connected drives.

Investigation will prove the greater economy of the "JAY BEE" over any grinding process you may have. Write for literature and complete details.

J. B. SEDBERRY, Inc. 140 Hickory Street, Utica, N. Y.
J. B. Sedberry Co., 819 Exchange Ave., Chicago, Ill.
Jay Bee Sales Co., 319-325 Live Stock Exchange Bldg. Kansas City, Mo.

IF YOU SELL

VITOZONE PROCESS DEODORANTS

—YOU'LL SELL MORE!

Exclusive new perfuming process of PURE PARA—dichlorobenzene under pressure up to EIGHTY TONS produces the VITOZONE DEODORANT BLOCKS.

MORE CONCENTRATED
MORE EFFICIENT
MORE ECONOMICAL

Write for Sample, Odors, Sizes and Price for packaging under

YOUR OWN LABEL

FULD BROS. Inc

2310 Frederick Ave., Baltimore, Md.

Sanitary Chemicals For Jobbing Trade

COLORS

SOAP YELLOW No. 4321

is a color you will be pleased with. It produces a real yellow shade, and is fast.

•

Ask for sample

•

INTERSTATE COLOR CO., Inc.
Suite 819—41 PARK ROW
NEW YORK CITY

Say you saw it in SOAP!

Superintendent—Soap Maker, practical man with long experience at the soap business, seeks new connection. Good references and hard worker. Address Box 157, care *Soap.*

Salesman—Located Metropolitan New York would like to hear from manufacturers wanting personal sales representation here. References furnished. Address Box 158, care *Soap.*

Positions Open

Chemist—Commercial, experienced in floor waxes, furniture and metal polishes. Optional opportunity to buy an interest in established firm. State full particulars as to qualifications experience, etc. Address Box 154, care *Soap.*

Salesmen Wanted in Various States as an allied line, to sell established line of waxes and polishes manufactured by one of the oldest wax concerns in America. Only producers need apply. Commission basis, references required with application. Address Box 156, care *Soap.*

Soap Maker and Chemist, with long years' experience over here and abroad—reliable in every respect and familiar with the manufacture of all kinds of soaps from A to Z. Best references. Address Box 140, care *Soap.*

Representatives:—New York, Chicago, Detroit, Boston, Philadelphia, and St. Louis, calling on manufacturers of liquid products to handle line of necessary equipment; commission basis. Address Box 165, care *Soap.*

Wanted—Salesman to sell chip soap in bulk, under private brands on a strictly commission basis. Reply with full particulars. Address Box 153, care *Soap.*

Miscellaneous

For Sale—Electrical driven Para Block Press, complete with dies, also horizontal worm mixer. Cost $5,000.00, price $600.00. Address Box 161, care *Soap.*

For Sale: Profitable exclusive manufacturing chemical business, established 1900—specializing in Animal Dips, Insecticides, Fungicides. Located in mid-western city. $15,000.00. Illness in family forces sacrifice. Address Box 150, care *Soap.*

Manufacturer's Agent—Temporarily in the east, will handle line of soaps and janitor supplies in California for responsible manufacturer. Thoroughly familiar with Pacific Coast territory. Amply financed. Address Box 145, care *Soap.*

REBUILT SOAP MACHINERY

1—Ralston Power Soap Press.
2—16x40 Water Cooled Roller Mills.
Proctor Dryer and 5-Roll Chilling Unit.
24—1200 lb. Frames.
1—Scott Glycerine Evaporator.
2—Foot Para Block and Soap Presses.
1—Houchin Amalgamator.
3—Dopp and Houchin Vertical Crutchers.
1—1500-lb. Horizontal Crutcher.
2—3 Roll Granite Stone Mills.
1—Simplex Soap Powder Grinder.
Cutting Tables, Slabbers, Kettles, Pumps, Tanks, Filter Presses, Wrapping Machines, Tube Fillers, Closers, Crimpers, Dry Powder Mixers, etc.

Send for Complete List (Bulletin No. 10)

We buy and sell from single items to complete plants.

Stein-Brill Corporation

25 Church Street New York, N. Y.

Phone: BArclay 7—4851 Cable Address: "BRISTEN"

We Manufacture

For The Trade ONLY

Liquid Soap Base
Auto Soaps
Potash Oil Soap
Shampoo
U.S.P. Cresol Compound
Coal Tar Disinfectants
Liquid Soap
Pine Oil Soap
U.S.P. Green Soap
Shampoo Base
Pine Oil Disinfectants
Insecticides

Ask for samples of these specialty bulk products

HARLEY SOAP CO.

2852 E. Pacific St. Philadelphia

FISH OIL SOAP

POTASSIUM OR SODIUM

Made to any manufacturer's specifications. Prices lower now than at any other time.

Write for Samples and Prices

SILMO CHEMICAL CO., INC.
Vineland, New Jersey

found money

If *you* are not using Vioflor you are throwing away 40% to 70% of your cost for perfuming insecticides, naphthas, polishes, inks, para-blocks, etc . . . .

Without changing the odor effect now in your product!

It takes but a few minutes to demonstrate this.

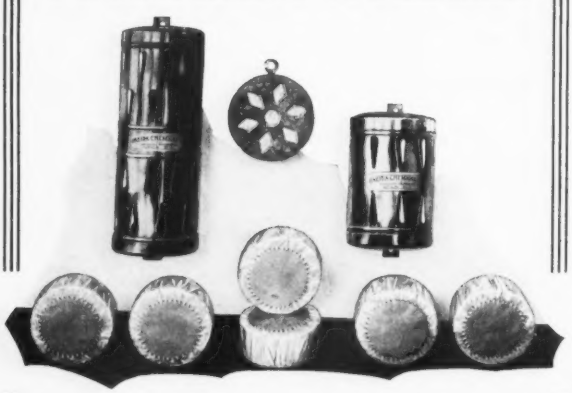
Allow us to submit samples and further details.

Manufactured by CREPIN & DOUMIN, Ltd., London, England

Sold in the United States and Canada by

JOHN POWELL & CO., Inc.
114 East 32nd Street :: :: New York, N. Y.

Durable and Distinctive
DEODORANT HOLDERS



Why continue to supply your customers with unattractive, tin holders for deodorizing blocks and cakes when you can buy an excellent Oneida holder at low cost? These holders are strongly constructed and are attractively finished in oxidized copper. They may be used with cakes or blocks. Send for a sample and let us quote on your requirements, available with or without your own name plate.

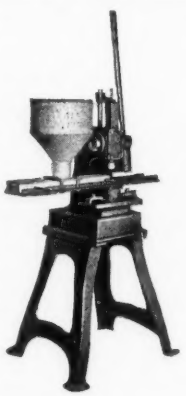
We also offer attractively wrapped cakes in bulk to jobbers. Our prices are competitive.

ONEIDA CHEMICAL CO.
760 BLANDINA ST., UTICA, N. Y.

REQUIRE MECHANICAL HELP?

The two practical machines shown here comprise all you need to produce very satisfactory *Paradichlorbenzene Disinfecting Blocks*, or *Moth Repellent Tablets.*

The small machine illustrated is a mixer which will blend colors, perfumes, binders or cheapening ingredients to any batch with the greatest of satisfaction, and the large machine will compress the mixture into blocks and tablets of any shape or form that dies can give.



The mixer is equally usable on dry powders such as roach, pyrethrum or other blending operations. Likewise for shaving, face and other creams, for smoothing, softening and giving that "velvety texture."

The hand lever press has more power than cheap foot lever presses and will produce fine looking blocks very rapidly by any kind of labor, male or female.

Samples, made from your materials, will gladly be submitted. Guaranteed saving of 5% to 10% over hot process.

HUBER MACHINE CO.
259 — 46th St. Brooklyn, N. Y.
Makers of good soap machinery for forty years.

Say you saw it in SOAP!

Att: Soap Manufacturers—Do you want distribution of your product in New York State? We are calling on the following trade: Merchandising jobber, department and chain stores, wholesale and retail trade for leading soap manufacturer. Address Box 159, care *Soap*.

For Sale: 1—Perfection type Houchin-Aiken Soap Crutcher, steam jacketed, 1,500 lbs. capacity. New condition. Price $350.00. Address Box 125, care *Soap*.

Wanted: Exterminating business for cash, must be established. No brokers need apply as this is wanted by private party. Address Box 141, care *Soap*.

Agent, desires to handle good line of toilet soaps for responsible manufacturer in New York State and New England. Address Box 160, care *Soap*.

Equipment Wanted: Electric blowers about ⅓ H.P. size and Nibrox barrel and bag packers. Must be in good condition; state price. Address Box 136, care *Soap*.

The new research laboratories of Merck & Co., Rahway, N. J., will be formally opened about March 1, and will then house all research activities of the company. Dr. Hans Molitor will have charge of the staff which is to be considerably increased in size.

—o—

Steps for the establishment of a Mayonnaise Institute were completed at the convention of the Mayonnaise Manufacturers' Association held at the Edgewater Beach Hotel, Chicago, January 19 and 20. Among the speakers at the two day session was Chas. P. McCormick, McCormick & Co., president of the association.

—o—

In a talk before the American Marketing Society, Dr. Henry C. Link secretary of the Psychological Corporation, referred to the Lever Bros. Co. advertisement for Lux soap, "Stop Those Runs in Stockings!" as the most successful single advertisement found in a recent test campaign.

—o—

The Policyholders Service Bureau of the Metropolitan Life Insurance Co. has issued a report entitled "Descriptive Information in Annual Reports to Stockholders," copies being available to readers of *Soap* upon application.

—o—

The American Beauty Nail Polish Co., New York, is moving to new and larger quarters at 53-57 West 14th Street.

TRISODIUM
DISODIUM
PHOSPHATES

PREFERRED for their colorless crystals, uniform size and sparkling appearance. Prompt deliveries made from convenient distributing points. Packed in 325-pound paper-lined barrels and paper-lined kegs. Also in bags.

BOWKER
CHEMICAL COMPANY
419 Fourth Ave., New York City

USED SOAP MACHINERY

Rebuilt - Guaranteed

SPECIALS

3—650 gal. Dopp Steam Jacketed Kettles.
1—Soap Chip Dryer, 1200 lb.
1—Houchin 1000 lb. Mixer, double shaft.
1—Dopp 1500 lb. Steam Jacketed Crutcher.

5—Houchin & Rutschman Plodders, 4", 6" double screw, 8", 10".
25—Soap Frames, 60"x45½"x14".
20—Filter Presses, 42"x42" to 12"x12".
18—Horizontal Mixers, 15 gal. to 1000 gals.
8—Granite 3 and 4-roll Mills—12", 18" and 24".
MISCELLANEOUS—Kettles, Mixers, Pony Mixers, Tube Fillers, Tanks, Labelers, Wrapping Machines, Boilers, Pumps, Power and Foot Presses, etc.

Send for latest Printed Bulletins

CONSOLIDATED
PRODUCTS COMPANY, INC.
15-21 Park Row, N. Y. C. BArclay 7—0600
We buy your idle Machinery—separate items or entire plants.

Where to buy

RAW MATERIALS AND EQUIPMENT

for the Manufacture of Soaps and Sanitary Products

NOTE: This is a classified list of the companies which advertise regularly in *Soap.* It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, etc., in which you are particularly interested. Refer to the Index to Advertisements, on the following pages, for page numbers. *"Say you saw it in SOAP."*

ALKALIES

American Cyanamid & Chemical Corp.
Columbia Alkali Co.
Hooker Electrochemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Stauffer Chemical Co.
Warner Chemical Co.
Welch, Holme & Clark Co.

AROMATIC CHEMICALS

Antoine Chiris Co.
Dodge & Olcott Co.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co.
Felton Chemical Co.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Maybee & Reynard, Inc.
Monsanto Chemical Works
Newport Chemical Works
Polaks Frutal Works
Sherka Chemical Co.
Solvay Sales Corp.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

BULK AND PRIVATE BRAND PRODUCTS

Baird & McGuire, Inc.
Chemical Supply Co.
Clifton Chemical Co.
Davies-Young Soap Co.
Eagle Soap Corp.
Fuld Bros.
Harley Soap Co.
Hull Co.
Koppers Products Co.
Kranich Soap Co.
Oneida Chemical Co.
Palmer Co.
Philadelphia Quartz Co.
John Powell & Co.
Geo. A. Schmidt & Co.
Sennewald Drug Co.
Silmo Chemical Co.
Stevens Soap Corp.
U. S. Sanitary Specialties Corp.
White Tar Co.
Windsor Wax Co.

CHEMICALS

American Cyanamid & Chemical Corp.
Bowker Chemical Co.
Columbia Alkali Co.
E. I. du Pont de Nemours & Co.
General Chemical Co.
Grasselli Chemical Co.
Hooker Electrochemical Co.
Mechling Bros. Chemical Co.
Monsanto Chemical Works
Newport Chemical Works
Niagara Alkali Co.
Philadelphia Quartz Co.
Solvay Sales Corp.
Standard Silicate Co.
Stauffer Chemical Co.
Swann Chemical Co.
Joseph Turner & Co.
Victor Chemical Works
Warner Chemical Co.
Welch, Holme & Clark Co.

COAL TAR RAW MATERIALS

(Cresylic Acid, Tar Acid oil, etc.)
American Cyanamid & Chemical Corp.
Baird & McGuire, Inc.
Barrett Co.
Koppers Products Co.
Monsanto Chemical Works
Reilly Chemical Co.
White Tar Co.

CONTAINERS

Cin-Made Corp. (Fibre Cans)
Cleveland Container Co. (Fibre Cans)
Continental Can Co. (Tin Cans)
Maryland Glass Corp. (Bottles)
Metal Package Corp. (Tin Cans)
Sefton National Fibre Can Co. (Fibre Cans)
William Vogel & Bros. (Tin Cans)

DEODORIZING BLOCK HOLDERS

Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Oneida Chemical Co.
Palmer Co.
U. S. Sanitary Specialties Corp.
William Vogel & Bro.

ESSENTIAL OILS

Antoine Chiris Co.
Dodge & Olcott Co.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Leghorn Trading Co.
Magnus, Maybee & Reynard, Inc.
Polaks Frutal Works
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

(*Continued on Page* 116)

Consulting Chemists and Engineers

Specializing in Soaps, Disinfectants, Insecticides, Polishes, Etc.

FOSTER D. SNELL, INC.

Chemists-Engineers

A technical organization offering complete consulting, research, operating and management service.

130 Clinton Street Brooklyn, New York

Expert Color Service—Free!

To manufacturers of soap, toilet preparations, pharmaceutical products, disinfectants, motor fuels, insecticides, sweeping compounds, cleansers, polishes and similar products. We offer, free, our services to help you secure the proper coloring for your finished product.

Eaton-Clark Co., 1482 Franklin St., Detroit

Specialists in Dyestuffs and Chemicals Since 1838.

FRANK R. GUNN COMPANY

Analytical and Consulting Chemists

Ontario and Brabant Sts. Philadelphia, Pa.

Skinner & Sherman, Inc.

246 Stuart Street, Boston, Mass.

Bacteriologists and Chemists

Disinfectants tested for germicidal value or phenol coefficient by any of the recognized methods.

Research—Analyses—Tests

LLOYD A. HALL

Research and Consulting Chemist

Specialist in the analysis, development and improvement of soaps, disinfectants, insecticides, cleansers, polishes and allied products since 1915.

Complete Research and Consulting Services.

LABORATORIES

1415 W. 37th ST. CHICAGO, ILL.

Los Angeles Associate, Roger W. Truesdail, Ph. D.

F. & S.

Quality Colors *for* TOILET SOAPS LIQUID SOAPS

TOILET PREPARATIONS

Long experience enables us to produce colors for all types of soaps.

If you have a shade you want matched send us a sample. We have complete facilities for matching.

Liquid soap colors a specialty—send for samples of F. & S. greens and ambers.

FEZANDIE & SPERRLE, Inc.

205 FULTON STREET

NEW YORK, N. Y.

Import—Manufacture—Export

POWDERED & GRANULATED PYRETHRUM

The highest grade of pyrethrum, powdered or granulated by up-to-date, efficient grinders, can be secured on short notice in *any* quantity.

All forms of pyrethrum, including concentrated oil extracts, are manufactured by rigidly controlled methods and are delivered with *known* toxic content.

PYRETHRUM-ROTENONE COMBINATIONS

Effective Concentrates that *stay in solution* are available to established manufacturers.

STEAMOL

Another new product — non-poisonous insecticidal concentrate for dispersion by steam atomizer. No obnoxious odors.

Standardized Liquid and Dust Pyrethrum Insecticides

McCORMICK & CO., Inc.

• BALTIMORE-MARYLAND •

RAW MATERIAL and EQUIPMENT GUIDE

(*Continued from page* 114)

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MACHINERY

Alsop Engineering Co. (Liquid mixing, filling and storage)
Carnegie Steel Co. (Stainless Steel)
Anthony J. Fries (Soap Dies)
B. F. Gump Co. (Barrel Packers, Packing, Weighing, Mixing and Conveying Equipment)
Houchin Machinery Co. (Soap Machinery)
Huber Machine Co. (Soap Machinery)
Illinois Steel Co. (Stainless Steel)
R. A. Jones & Co. (Automatic Presses and Cartoners)
Proctor & Schwartz (Dryers)
J. B. Sedberry Co. (Grinders)
Sowers Mfg. Co. (Crutchers)

MACHINERY, USED

Consolidated Products Co.
Newman Tallow & Soap Machinery Co.
Stein-Brill Co.

METAL CAPS

Anchor Cap & Closure Corp.
Crown Cork & Seal Co.
Ferdinand Gutmann & Co.

MISCELLANEOUS MATERIALS

Derris Inc. (Derris Products)
General Naval Stores Co. (Pine Oil-Rosin)
Hercules Powder Co. (Pine Oil and Rosin)
Ore & Chemical Corp. (Thallium Sulfate) Thallium
Pylam Products Co. (Lathering Agent)
Rohm & Haas Co. (Insecticide Base)
Sennewald Drug Co. (Poison Baits)
L. Sonneborn Sons (Petroleum Products)
Taylor Lowenstein & Co. (Rosin-Pine Oil)
Thoricide Co. (Insecticide Base)

OILS AND FATS

Leghorn Trading Co.
Newman Tallow & Soap Machinery Co.
Theobald Annual By-Products Refinery
Welch, Holme & Clark Co.

PARADICHLORBENZENE

E. I. du Pont de Nemours & Co.
Hooker Electrochemical Co.
Monsanto Chemical Works
Niagara Alkali Co.
Solvay Sales Corp.

PERFUMING COMPOUNDS

Antoine Chiris Co.
Dodge & Olcott Co.
P. R. Dreyer, Inc.
Felton Chemical Corp.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Maybee & Reynard, Inc.
Polaks Frutal Works
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

PYRETHRUM PRODUCTS

(Insect Flowers, Powder and Pyr. Ext.)

Crude Drug Importers
McCormick & Co.
McLaughlin, Gormley, King Co.
S. B. Penick & Co.
John Powell & Co.

SANITARY ACCESSORIES

American Standard Mfg. Co. (Mops, Sponges)

SOAP COLORS

Eaton-Clark Co.
Fezandie & Sperrle
Interstate Color Co.
Pylam Products Co.

SOAP DISPENSERS

Auto-Sun Products Co.
Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Palmer Co.
U. S. Sanitary Specialties Co.

SODIUM SILICATE

American Cyanamid & Chemical Corp.
General Chemical Co.
Grasselli Chemical Co.
Mechling Bros. Chemical Co.
Philadelphia Quartz Co.
Standard Silicate Co.

SPRAYERS

Breuer Electric Mfg. Co.
Dobbins Mfg. Co.
Hudson Mfg. Co.
Lowell Sprayer Co.
Metal Specialties Mfg. Co.
Potato Implement Co.
Sprayit
William Vogel & Bros.

STEEL CONTAINERS

John Trageser Steam Copper Works (Pails and Drums)
Wilson & Bennett Mfg. Co. (Pails and Drums)

SULFONATED OILS

National Oil Products Co.
Richards Chemical Works

TRI SODIUM PHOSPHATE

American Cyanamid & Chemical Corp.
Bowker Chemical Co.
General Chemical Co.
Grasselli Chemical Co.
Swann Chemical Co.
Victor Chemical Works
Warner Chemical Co.

FLOOR WAX

LIQUID
PASTE
POWDER

New Improved Self-Polishing Liquid Wax

UNDER YOUR OWN LABEL

We print the label

Send for Samples and Quotations

WINDSOR WAX COMPANY

50 Church Street *REctor 2—0661* **New York, N. Y.**
Factory: 611-617 Newark St., Hoboken, N. J.

"FILMA-SEAL"

(the double seal of cap and film)

Is used on many nationally known products

Prevents

Evaporation—Leakage—Tampering

Send us a few of your packages, glass or tin, to "FILMA-SEAL" and we will prove its advantages to you.

FERDINAND GUTMANN & CO.

Bush Terminal No. 19 **Brooklyn, N. Y.**
Trade Marks Reg. Pats. Pending

SOAP POWDER

FLUFFY AND HEAVY

Scouring Powder

and

Detergent

Packed in barrels or kegs.
In bulk to the trade.

STEVENS SOAP CORP.

200 Sullivan St., Brooklyn, N. Y.

CUmberland 6—3747

MECHLING'S

SILICATE OF SODA

ESTABLISHED 1869

MECHLING BROS. CHEMICAL COMPANY

PHILADELPHIA • CAMDEN, N.J. BOSTON, MASS.

Say you saw it in SOAP!

Olive Oil

Olive Oil Foots

Deliveries spot and future in barrels, tank cars, drums or tank wagons.

ESSENTIAL OILS

Lemon—Bergamot—Orange

LEGHORN TRADING CO.
INC.
155 East 44th St., New York
Phone: VAnderbilt 3—6361-2-3
ITALY — SPAIN — GREECE — TURKEY — AFRICA

Cans . .

Fibre Ends
Metal Ends
for Dry Products

Insecticide Cans
Moth Cake Cans
Powdered Soap Cans
Cleanser Cans
Deodorant Cans

THE finest fibre Can and Tube Service in America

SEFTON

SEFTON NATIONAL FIBRE CAN CO.
3205 Big Bend Road
MAPLEWOOD, ST. LOUIS, MISSOURI
Plants in Chicago, New Iberia, La., and St. Louis

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Lowell Sprayer Co. ..... January Issue

Say you saw it in SOAP!

SOAP DIES and STAMPS

—for—
TOILET SOAPS
LAUNDRY SOAPS
BATH TABLETS
STAMPING

For Foot and Power Presses

Manufacture Backed by 35 Years' Experience

ANTHONY J. FRIES

717 Sycamore Street Cincinnati, O., U. S. A.

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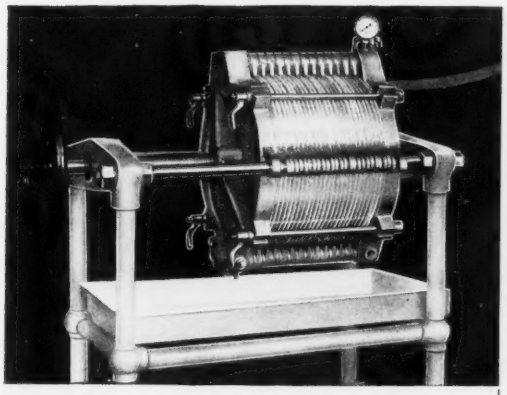
CLARIFICATION 2nd Stage



HOW MUCH can still be taken out of your filtered liquid you will never know until we have shown you by a free clarification test, without any obligation on your part.

KEEP your filter presses. You will need them more when we show you how to improve their product.

Follow this up. Ask us for details. We will instruct you how to submit a sample for our free test.

ALSOP ENGINEERING CORP.

Electric Filters, Asbestos Discs, Pumps, Glass Lined Tanks and Mixers

39 West 60th Street New York, N. Y.

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World's Tallest Hotel 46 Stories High

LEONARD HICKS
Managing Director

The extra attention given to the needs of guests will favorably impress you. Nearest to stores, offices, theatres and railroad stations. A special floor is reserved for ladies. Each guest room is outside with bath, circulating ice water, bed-head reading lamp and Servidor. Housekeeper on each floor. Garage facilities.

2500 ROOMS $2.50 UP

MORRISON HOTEL

Madison and Clark Streets CHICAGO

MORE

U. S. STANDARD GUM ROSIN

is used in the soap industry than in any other.

BUY AT THE SOURCE

We have storage yards all over Dixie and can supply Rosin in wooden barrels or in metal drums.

Also Steam Distilled

PINE OIL

TAYLOR, LOWENSTEIN & COMPANY

MOBILE the seaport of ALABAMA *Agents Throughout the World*

Say you saw it in SOAP!

You Manufacture a Good Automobile Cleaner-Polish

Do you have to shake before using?

You will not if you use
HULL EMULSIFIER

Ask for Details.

The Hull Company

130 Clinton Street **Brooklyn, N. Y.**

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Pave the way to more sales with actual names and addresses of Live prospects.

Get them from the original compilers of basic list information—up to date—accurate—guaranteed.

Tell us about your business. We'll help you find the prospects. No obligation for consultation service.

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Gives counts and prices on 8,000 lines of business. Shows you how to get special lists by territories and line of business. Auto lists of all kinds.
Shows you how to use the mails to sell your products and services. Write today.

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Polk Bldg.—Detroit, Mich.
Branches in Principal Cities
World's Largest City Directory Publishers
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STEEL DRUMS

That are built to last!

30-55-110 gal. sizes

The BEST
Containers for
LIQUID SOAPS
DISINFECTANTS
CLEANSERS
ESSENTIAL OILS
VEGETABLE OILS
CHEMICALS
GLYCERIN
ETC.

Black, Galvanized, Tinned

Sturdy and long lasting, the Trageser heavy duty steel drum will be carrying your materials to market long after cheap containers have found the junk pile. Order a sample drum.

JOHN TRAGESER STEAM COPPER WORKS
GRAND STREET MASPETH, L. I., N. Y.

Special tanks, tubs, pails, etc.

There's Sales Appeal in the Tubular Package

A powder drum from Cleveland Tubes

A Tubular shape "does something" to a package that's hard to explain but certainly adds to its interest, draws you to it. And then, too, there's the item of economy. Our job is to help develop new, individual tubular packages, to achieve new economies, new sales appeal for our customers. Why not get in touch with us, now?

The Cleveland Container Company
601 West 26th St. New York City
Plants: Cleveland, Detroit, Hoboken, Philadelphia
Sales Offices: Pittsburgh, Rochester, Chicago

Palmer Soap Dispensers

The Palmer line includes a type and size dispenser for every requirement . . . in a complete price range.

The Super Server, illustrated at right, is a low-priced push-in type dispenser that is an exceptional value. Metal parts are non-corrosive, stainless, chrome alloy. Beautiful natural chrome finish bracket. Valve parts are easily removed for cleaning or replacement. Crystal glass decagon bowl (opal glass on special order). Large one-inch opening for easy filling. A neat, compact, durable dispenser. The lowest-priced push-in dispenser.

Palmer "D. C." Dispenser
(Dependable Construction)

The lowest-priced dispenser of this type ever offered. Not necessary to remove or invert bowl for filling—pour in soap through one-inch top opening. Has simple, positive, spring-controlled valve. Regularly furnished with decagon bowl like Super Server, or with round bowl on special orders.

We manufacture a complete line of janitor and sanitary supplies. Write for our distributor proposition.

Palmer PRODUCTS INC
WAUKESHA, WIS.
Adjacent to Milwaukee

Now—THE NEW SMALL
No. 10
VI BROX PACKER

Furnished Complete with 1/6 H.P. Motor and "V" Belt Drive

FOR PACKING, "RAPIDLY AND THOROUGHLY," CANS, CARTONS, BOXES AND BAGS WEIGHING FROM 5 UP TO 12 POUNDS

The new No. 10 VI BROX was designed and built to meet a definite demand for a packer to pack small bags, boxes, and other containers, weighing up to 12 pounds.

VI BROX Packers are rapid, require a small amount of power, and in many cases make possible the use of smaller containers.

Let us show you the possibilities of a complete weighing and packing unit, combining Edtbauer Duplex Net Weigher and VI BROX Packer, for your packages ranging up to 12 pounds.

Manufactured by

EST. 1872 **B. F. GUMP CO.** INC. 1901

MIXING, SIFTING and PACKING EQUIPMENT
424-430 S. CLINTON ST. CHICAGO

Say you saw it in SOAP!

Southward
Via MUNSON
to Summer Sunshine

NASSAU

BRITAIN'S "ISLE OF JUNE"

NEW COLONIAL Now Open European Plan

Single rooms with bath from $6 per day
Double rooms with bath from $10 per day

Enjoy the glorious Summer sunshine and perfect climate of this sub-tropical island where the average winter temperature is 70 degrees and there is practically no rain throughout the winter season. Every summer sport, including swimming from wonderful Paradise Beach. Live luxuriously at the magnificent fire-proof New Colonial Hotel, which offers the finest cuisine and service, and superb accommodations.

New Radio Telephone Service permits keeping in close touch with business or home

WEEKLY SAILINGS on Fridays to Nassau, and on the Nassau, Miami, Havana Cruise; S. S. Pan America, (21,000 tons) and S. S. Munargo alternating. Next Sailings February 17, 24, March 3, 10, 17, 24, 31.

NASSAU · MIAMI · HAVANA CRUISES · $115 · 12 3/4 DAYS

WEEKLY SAILINGS AS SHOWN ABOVE

See 3 of the world's most fascinating ports. Spend 3 days in Nassau where you enjoy swimming from delightful Paradise Beach, 2 days in Miami, 2½ days in beautiful Havana. The steamer is your hotel. Sight-seeing trips at each port. **OR you can take the steamer round trip to Nassau only and stay 7 days at the New Colonial, including room with private bath . . . $125 European plan.**

OTHER MUNSON SERVICES . . . Regular sailings to Bermuda on the 21,000 ton S. S. American Legion, or her sister-ships, $50. Fortnightly service to South America with calls at Rio de Janeiro, Santos, Montevideo, and Buenos Aires.

Special arrangements available for large parties or conventions
All Sailings from Pier 64, North River, New York
For further information see local tourist agent or write Dept. 2

MUNSON S. S. LINES
67 Wall St., New York, N. Y.
BOwling Green 9-3300

VIRONES
(IONONES)

Domestic Manufacture

Virone 100%
Virone Alpha Virone Beta

This really splendid series of Ionones, recently perfected, are particularly useful in the fabrication of perfume materials and fine toilet soaps.

The Virones are priced quite moderately and we solicit your inquiry for samples of one or all types.

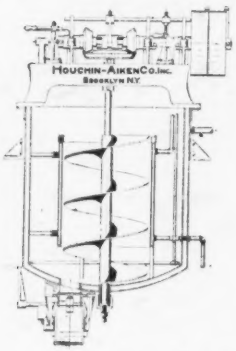
UNGERER & CO.

13-15 West 20th Street

NEW YORK

NEW and *USED*
HOUCHIN SOAP MACHINERY

Perfection Crutcher
Sliding Gate Valve

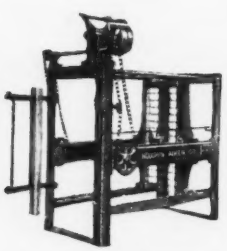


Perfection Crutcher Cross
Section View Plunger
Type Valve

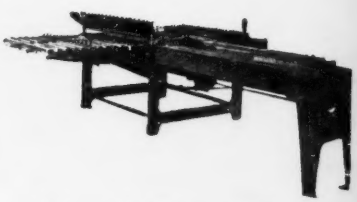
Horizontal Crutcher

Empire State
Press

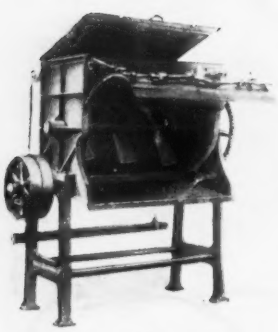
Standard
Soap Frame



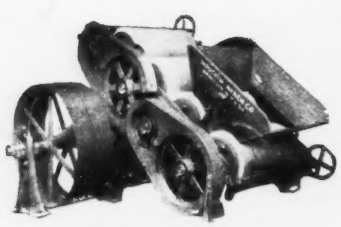
Automatic Power
Slabber



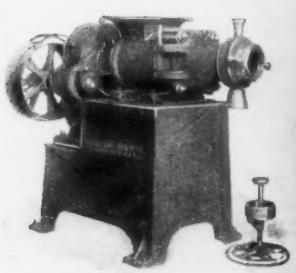
Automatic Power Cutting
Table



Ideal Amalgamator



4-Roll Mill
Mills built with 3 to 12 Chilled
Iron or Granite Rolls



Spur Gear 10″ Screw Plodder
Plodders furnished with 2½″
to 12″ screws.

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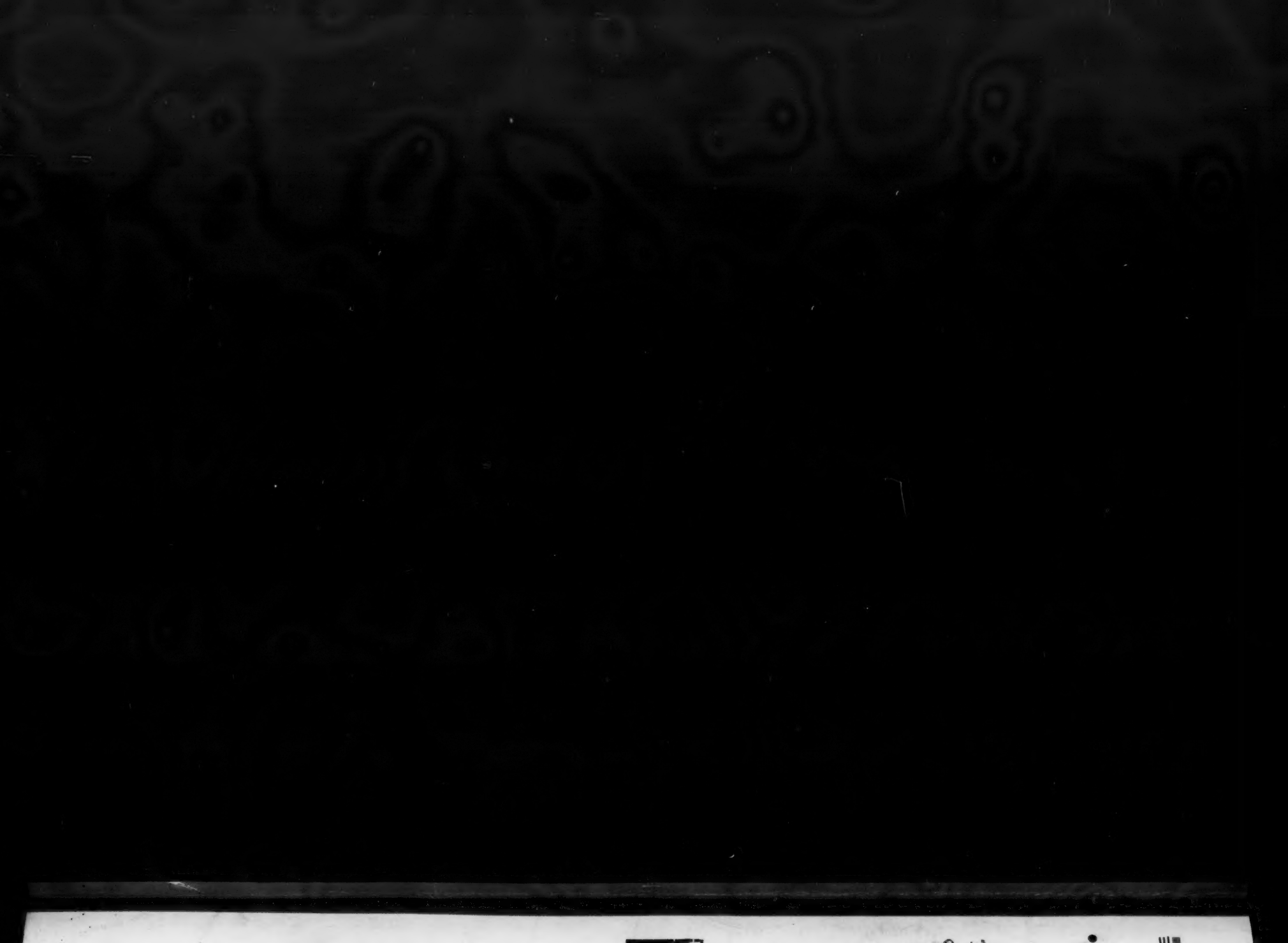
HOUCHIN MACHINERY CO., Inc.

FORMERLY HOUCHIN-AIKEN CO., INC.

HAWTHORNE, NEW JERSEY